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CORPORATION FINANCE

BY

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SEVENTH EDITION

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PREFACE

The first edition of *Corporation Finance* was published in 1910. The book has been revised six times, and owing to the constant changes in the subject matter, it has again been found necessary, in order to give proper treatment to the subject, to make substantial additions and changes.

The discussion starts with the normal activities of the corporation, involving promotion, preparation of the financial plan, and the provision of money. Under the head of the financial plan is presented a full description of all the instruments which are used in raising money, with different types of stocks, notes and bonds, guarantees included in the preferred stock contract, and the provisions for the repayment of bonds by the operation of sinking funds. The different forms of sinking funds are fully explained. A full description is given of the sale of securities, including dealing with investment bankers with relation to corporate capital, the precautions taken by the banker to secure the corporations whose securities he offers for sale, and the operation of the underwriting syndicate. In connection with the sale of securities a considerable amount of space is devoted to overcapitalization and the methods of protecting the public from the sale of insecure stocks and bonds. In this connection the activities of the blue sky commissions, the Interstate Commerce Commission and public service commissions and the work of the Post Office Department are outlined. As an additional safeguard to the investing public, the investment trust, a new development in American finance by which the risk of insecure investments is minimized, is described.

Following the treatment of promotion, capitalization, and

financing of the corporation comes the description of its financial activities. Here a departure has been made by giving a full discussion of the determination of profits, and in connection with this portion of the book the subjects of maintenance, betterments, and depreciation are discussed at some length. Following the determination of profits comes the discussion of the management of the income account, including, among other matters, an account of the place of the bank loan in the financial management of the company.

The next subject discussed is the distribution of profits. Here the rules covering the distribution of profits and dividends to stockholders are set forth and illustrated, and a discussion is given of the subject of the property and stock dividends.

Thus far the discussion concerns the normal activities of the corporation up to the time when its expansion begins. The textbooks in corporation finance, including previous editions of this book, have followed the description of promotion, capitalization, and the management of income account with a description of the methods of financing expansion, involving the sale of securities and the different plans of consolidation. Further consideration has led the author to the conclusion that the sale of securities for the purpose of financing expansion does not essentially differ from the original sale of securities, and a clear presentation of the subject and its comprehension by the student are greatly assisted by including the description and discussion of all types of securities, used both in original promotion and expansion, under the head of the financial plan, especially since the financial plan of a well-organized corporation now makes ample provision for expansion under original mortgages and stock authorizations.

The subjects of expansion and reorganization are now considered. Starting with the necessity and advantages of providing new capital, the selection and employment of

various sources from which new resources are provided, profits, stock, bonds, and consolidation are explained and illustrated. Especial attention is given to consolidation, because of the prominence which this method of expansion has recently assumed, in chapters dealing with methods, forms, motives, and advantages. The discussion of the holding company, as limited by the Sherman Anti-Trust Law, which appeared in previous editions, has been included in this volume.

The discussion of reorganization has been somewhat expanded over previous editions. In addition to the reorganization of the capital account of solvent corporations and reorganization by court order, a chapter on voluntary reorganization of insolvent corporations, without court action, has been included. The discussion of receiverships and of reorganization after receiverships has been included without material change, since practice in this department has been modified only in the respect of submission to various public commissions for approval in the case of public utilities.

The three years which have passed since this book was last revised have largely changed the financial aspects of the business situation and have forced certain new revisions and additions. Railroad securities no longer occupy the first rank. Liberal bond capitalization can no longer be approved. Reorganizations have grown more drastic, and liquidation as standard financial practice has assumed greater prominence. So far as space permits, these changes have been pointed out. In particular, this edition contains a discussion of liquidation, which is likely to assume increasing importance.

E. S. M.

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CORPORATION FINANCE

CHAPTER I

INTRODUCTION

EVERY day opportunities for investment for the production of wealth are brought forward: deposits of minerals are discovered, franchises obtained, patents granted. Increasing population demands water, light, mechanical refrigeration, and transportation. The automobile, sanitary plumbing, tropical fruits, cosmetics, electrical household appliances, the multiplication of garments and footwear, the radio, the popular magazine, the movies, the resort hotel, and the amusement park are only a few of the modern innovations which are now regarded as necessities to decent existence. Human wants are indefinitely extensible. The luxuries of one generation become the necessities of the next. Upon their heels come crowding a host of new luxuries destined in their turn to rise to the rank of necessities.

Population is rapidly increasing. This increase in population is gathered into cities and towns, requiring elaborate and costly transportation systems and increasing the demands upon industry to feed, clothe, and house. In so-called "good" times and in bad, the increasing pressure of human desire is operating to call into being new industries and to enlarge the old.

At the basis of all industry lies the production of power. In this field we find abundant illustration of the multiplication of opportunities for the production of wealth. We have mechanical forced draft, now being applied to household heating; the mechanical stoker, in recent years applied to locomotive engines; and the use of pulverized fuel and

of compressed fuel. We have improved boiler and grate construction, and elaborate apparatus for testing the efficiency of fuels and boilers.

An examination of recent security offerings shows the great diversity of industrial development and the manifold directions of industrial interest. Here we find automobile manufacture; automobile parts and bodies; wire products; shipbuilding; radio; electrical appliances; soft drinks; sugar; aircraft; phonographs; men's clothing; agricultural machinery; fertilizers; fisheries; retail "chain" grocery, drug, hardware, candy, and department stores; musical instruments; rubber goods; railroads; railway equipment; electric light and power plants; municipal improvements; building materials and appliances; packaged food products; frozen meat and fish; gold and copper mining; oil and natural gas and real estate development. Each of these issues of stock or bonds was designed to raise money for some form of productive enterprise, to supply some new want, or to increase the means of satisfying old wants. Without investment, increased production would be impossible. Upon the investor rests the responsibility of adding to the wealth of the world. As he directs his funds to railroads, water power, irrigation, or shipbuilding, the productive energy of society is directed to this or that field of enterprise.

Methods of Investment

This office of investment is variously performed. Men may invest or capitalize their own savings. The farmer devotes one thousand dollars, half the proceeds of his last wheat crop, to the purchase of nitrate fertilizer. The New England cotton manufacturer invests his surplus earnings in a South Carolina mill where cheap power, labor and material invite development. The Bessemer steel maker adds an open hearth furnace to his equipment and takes advantage of a local supply of scrap. The Pennsylvania coal

operator or lumberman buys the cheap coal and timberland of the South. Every successful producer is continually devoting his surplus funds to enlarge his enterprise along lines with which he is familiar as competition compels or as opportunity presents for greater profits. The producer often branches out into other fields. The farmers of a locality erect a flour mill or a sawmill, or open a stone quarry; or a carriage maker engages in the manufacture of automobiles. Every industry is constantly growing out of the profits of the past. Individual producers are making ventures of their money into untried fields in enterprises where they alone stand to win or lose and where they act from personal knowledge of the opportunity.

There is a second class of investors which may include some of the first class. Its members are actuated by different motives and act in a different way. These persons have surplus funds from which they wish to obtain a profit. They are ready to buy the stock or bonds of any corporation which gives them the assurance of satisfactory returns. The members of this class are not, as a rule, in close touch with the industries whose securities they buy. A leather merchant invests in steel, a banker in railroads, a retail dealer in mining stock, not because he desires to identify himself with the business in which he invests, so far as to give it his close personal attention and to assist in its management, but solely that he may share in its profits. Included in this class of investors are insurance companies and trust estates. They take no part in managing the numerous enterprises whose securities they buy. They know little or nothing about the business. They are only interested in the income.

The importance of this outside interest in industry is steadily increasing. Production units are growing larger. It becomes always more difficult for a few men to combine a sufficient amount of money to start a new enterprise.

Thirty years ago a few thousand dollars would build a sawmill. A half dozen farmers, by combining their savings, could start in the lumber business. To-day a well-equipped sawmill may cost $500,000. Added to this may be the expense of twenty miles of railroad to reach the timber. The assistance of outside capital is becoming every year more essential to the development of any industry.

The investor is invited to furnish funds for two classes of enterprises: those already in existence and those to come into existence through the money which he advances. The investor will not look up new opportunities. He will, however, buy securities which are properly offered to him. The owners of this outside capital know little about the technical aspects of the industries into which they put their money. They are acquainted with these industries merely as sources of profit. If they can be given satisfactory assurances of profits from a railroad or a gas company, they are willing to invest money in these enterprises. Investors will not, however, search out and investigate the propositions into which, when once discovered and formulated, they are willing to put their money.

This attitude of the investor brings forward the promoter. His function in industry is to discover investment opportunities, form companies to develop these opportunities, and sell the securities of those companies to obtain funds for development. The function of promotion involves three stages: (1) the discovery of the proposition, including its investigation; (2) the assembling; and (3) the financing of the proposition.

The work of the promoter may be explained by describing the promotion of a small coal company in western Pennsylvania.

Western Pennsylvania is underlaid by great sheets of bituminous coal. The coal is generally of good quality and near the largest markets. A large number of mining propo-

sitions, most of which have since been consolidated under the ownership of a few corporations, have been developed in this region. The law gives the owner of land the right to all minerals found beneath its surface. The land under which this coal lies is poor farming land broken into narrow valleys intersected by streams. These streams have scoured out through the coal measures deep channels offering easy access to coal seams whose outcroppings are exposed on the banks and hillsides. This land is owned in tracts varying from ten acres up to three hundred acres. Many of the farmers mine coal for their own use and for local sale. A large number of "country banks" are found where, with primitive appliances, a considerable amount of coal is extracted. The sale of this coal is usually restricted to the immediate neighborhood since, in the absence of a large mining development, railway facilities would not be provided. Only in periods of great scarcity and high prices is this country bank coal hauled to a railroad and sent to market.

Such a region attracts the attention of bankers and capitalists who are interested in the development of coal properties. They organize a syndicate for its development. The syndicate is organized in much the same manner as a partnership association, under the terms of a syndicate agreement. The subscribers associate themselves into an organization which shall be managed by one or more of their number known as "syndicate managers," and agree to pay into a common fund a certain amount of money to be used in the development of the enterprise. A call is then made upon the members for a small percentage of their subscriptions for preliminary expenses. The syndicate is now ready for operation.

Some of their number may have received information concerning the proposed coal-mining development from a local promoter. The local promoter is usually a small lawyer or rural capitalist whose ambition outruns his means. He

may have spent some money in preliminary surveys and examinations. The results of this investigation he passes on to some banker or mining official who has command of the necessary money, and who can, with his associates, develop the proposition. At this point, the promoter, the local man who has introduced the proposition to the capitalist, passes out of the narrative. He may be paid a certain amount of cash for the work he has done, or he may be given an interest in the syndicate, which secures him a small amount of stock of the new company. He is not usually an important factor in the future development of the enterprise.

The syndicate manager now arranges for a thorough examination of the property. From the reports of engineers, it is determined if the coal seam is regular, or faulted and broken requiring a large amount of expensive rock excavation for large development; also, if the proposed mining operation will be self-draining or if pumping machinery must be installed. The engineers' reports show the percentages of sulphur and phosphorus which the coal contains, and its properties as a coal out of which coke can be made which will stand up under heavy burdens in the blast furnace. Surveys will be made of the proposed railroad. The cost of mining development and of railway construction will be determined. The syndicate manager, if he has selected competent engineers, can gain approximately exact information concerning the physical features of the new enterprise.

In addition to the technical features, the financial aspect of the proposition is considered. The price of the land, the rates of freight charged by the railroad with which the short line will connect, and the prices of the coal in the accessible markets must be determined. Other considerations include the labor situation of the region, especially the strength of labor organizations, the laws of the state relating to labor, and the attitude of the railroads

toward a new mining enterprise—whether they will be helpful or indifferent.

After this information has been gathered, the decision may be to go forward or the proposition may be abandoned because of the discovery of unfavorable factors. This investigation of a proposition—the disclosure of all the factors, favorable and unfavorable, affecting its success—must be thoroughly carried through or the enterprise is likely to fail.

Successful Promotion Based on Adequate Investigation

The frequent disappointments in the development of new projects are due not so much to mistakes of management or insufficient capital as to faulty investigation reaching wrong conclusions as to business possibilities. So-called investigations made by local promoters are usually worthless. Their interests are so deeply involved in putting the best face possible on a scheme that both their observations and their deductions are of little value.[1] Even the investigations of so-called "experts" are open to serious question. The expert's views are also colored by his interests since he is often, apparently, employed not so much to keep his principal out of an investment as to confirm his principal's judgment that the enterprise will be successful. Only when the expert is on salary are his reports prevailingly pessimistic.

There is now in successful operation an interurban railroad running out about twelve miles from a terminal station at the end of a transportation line serving a large eastern city, through a number of fashionable suburban towns, paralleling throughout its entire distance the main line of a large and well-managed steam railway company. The fate of the company which constructed this line furnishes

[1] A case comes to mind where a promoter advanced the location of a large and well-populated cemetery on a proposed electric railroad as an argument for its construction.

an illustration of the blunders into which supposedly competent investigators are likely to fall in examining a business proposition. The syndicate which promoted and financed this enterprise employed engineers of high reputation to examine the cost and traffic of the proposed railroad. Estimates were made of the cost of obtaining ground for a private right of way and options were secured on a large amount of real estate for suburban development.

The engineers addressed themselves to the possibilities of traffic for the new line. The experience of interurban railroads in the West, where the experience of these experts had been gained, has been that a high-speed interurban line divides traffic with the steam line. It is assumed that, from the known traffic on the steam line, the number of passengers which will be drawn away to the electric road can be closely estimated. The engineers in this case followed this method. They made careful computations of the traffic at each one of the stations on the line of railroad which their electric line was to parallel. On the basis of this railroad traffic, they estimated the traffic of the projected suburban line. Their estimates were accepted and the line was built, about three and a half million dollars being spent.

No sooner was the line put into operation, than it was discovered that the engineers had made serious blunders. The people of the towns through which the new line ran were satisfied with the service furnished them by the steam line. The railroad delivered its passengers in the heart of the city. The new suburban line, on the other hand, gave a connection with a city line, necessitating a change of cars. The class of people who were expected to patronize the new road were well-to-do. To them, the advantages of saving a few cents in fare and the more frequent service offered by the electric line were of little consequence. The traffic of the new road proved a sore disappointment to its promoters. It failed from the beginning to pay its fixed charges, and for a time even its operating expenses were

not earned. It was eventually sold at less than one-third of the amount of money invested in its construction. An expensive extension was built to make it profitable. The original projectors have not participated in its success.

The Promoting Engineer

The difficulty in obtaining accurate information concerning the merits of propositions which arouse the interest of active men of affairs has led to the development of a new type of promoter, the promoting engineer. The promoting engineer is a firm or corporation engaged in the business of building trolley roads, power plants, railroads—doing all kinds of engineering and construction work within a certain field. They have a certain capital—the capital of some engineering firms runs into millions—and they can borrow large amounts from banks. They built up a permanent organization of engineers, accountants, and lawyers.

The engineering concern wishes to keep this organization employed. Among their clients are bankers and capitalists who seek their advice on the merits of propositions. If their opinion is favorable, they are likely to obtain the engineering work. Usually in such a case, they include the fee for investigation in their engineering commission. As a result of these inquiries and employments, the engineering concern in time advances to the investigation and presentation of propositions of their own. They have no lack of opportunities. Large numbers of propositions are thrust upon them from which they can choose those which seem promising. If, after a preliminary investigation of a project, the engineers consider it worth undertaking, they secure the necessary options and present the scheme to bankers with whom they are connected.

A proposition submitted by an engineering concern of repute and authority will receive respectful attention from the banker. He recognizes that the engineer's interest is not primarily to take part in the promotion, but to secure

employment for himself and his organization, and to make his regular engineering profits. The engineer may also, in order finally to convince the banker, take part in the financing of the enterprise. He may acquire an interest in the syndicate organized for its development. This interest the engineer will dispose of, should opportunity offer, even if he has to sell it at cost, either to the members of the syndicate or to outsiders, with the consent of the syndicate manager. The engineer is not in the banking business and is glad to free his money for its regular employment. The engineer may go farther and supervise the operations of the electric railway or gas plant during its initial stages. He assumes these duties, as a rule, with the cordial approval of the bankers. They are glad to secure an assurance of competent management which the engineer is qualified to furnish.

The promoting engineer possesses advantages over any other kind of investigator, in that his interest is on the side of thorough investigation, economical construction, and careful management. Especially when the engineer shares the risks of the undertaking is the banker glad to defer to his judgment and to invest money in the projects which the engineer indorses. There is a large number of engineering concerns of this character in the United States. The importance of thorough investigation is now so generally recognized that alliances of this character between engineers and bankers are general. They are usually found more satisfactory than when the engineer is employed by the banker in an expert capacity.

CHAPTER II

THE WORK OF THE PROMOTER

Assembling the Proposition by Option

After the proposition is approved, on the basis of the investigation, the next step is to assemble it. By assembling is meant the securing of control of the property or rights upon which the proposition must be based. There are two methods of getting a property under control. The first is to buy it and the second is to buy the right to buy it; in other words, to secure an option upon it. Outright purchase is, for the promoter, usually impossible, especially in new enterprises which are to be financed by bankers. The money for purchase of land, coal, patents, or water rights, must first be obtained from bankers who will reimburse themselves by selling securities to their customers. Bankers will not undertake to advance large amounts of money for the development of a scheme until there is a definite proposition put before them. They will not set aside $1,000,000 of their funds to develop a water power proposition until all the lands adjacent to the water power, and which will be flooded by the proposed dam, have been secured. A part of this money the bankers may borrow. They will not undertake these responsibilities merely to encourage the promoters to make an earnest effort to get the proposition together. The promoters must give them definite assurances that all the property necessary to the project is under their control before the bankers will commit themselves to advance the necessary funds. As for the promoters, even if they have the money, they cannot

afford to risk it in the purchase of resources whose development they may not be able to finance.

For example, in the coal land proposition which we have considered, to buy the 5,000 acres which are necessary, at $50 an acre, would require $250,000. Suppose this initial outlay is made, the promoters may then find, owing to the conditions of the money market or to some hitherto undiscovered imperfection in the project, that bankers refuse to advance the money for development. The promoters have $250,000 locked up in undeveloped property, a large part of which may have been borrowed, and they may be seriously embarrassed before they succeed, if they ever succeed, in financing their proposition. Purchase of properties for the development of business propositions is not merely undesirable but unnecessary. The same result as purchase, so far as the promoters are concerned, can be reached by buying the right to purchase; in other words, by obtaining an option on the property.

An option is a privilege existing in one person, for which he has paid, giving him the right to buy certain realty, merchandise, or securities from another person within a certain time at a fixed price, or to sell such property to such other persons at an agreed price and time. An option is, therefore, an unaccepted offer which runs for a definite time. It states the terms and conditions on which the owner is willing to sell or lease his property, if the prospective buyer elects to accept them within the time named in the option. If the holder of the option, known as the optionee, elects to accept the offer of the optionor, he must give notice to the optionor and the accepted offer thereupon becomes a binding contract. If an acceptance is not given within the time specified, the owner is no longer bound by his offer, and the option is at an end. A man who grants an option on his property binds himself to make a contract to sell that property at a future time and to convey a good title. An option contract, like any other contract, is based

upon a consideration. This may be small; one dollar is a binding consideration. It is usual, if a substantial payment is made, to apply this on the purchase price if the offer is accepted.

Rights and Liabilities under the Option

The rights of the optionee in the property are those expressly named in the contract of option, and those which are implied from the terms of the contract. It is usual to give the optionee some right to enter upon to examine, and sometimes even to take temporary charge of the property which he proposes to purchase. For example, the Carib Syndicate, Ltd., in 1921 gave an option to the Texas Company for the purchase of an interest in the Carib Syndicate. The option provided that, during its duration, the Texas Company should manage the properties of the Carib Syndicate and might advance money in connection with the management which should be eventually repaid. After four years' operation, the option expired, and it was necessary for the Carib Syndicate to repay $430,000 advanced.

A privilege commonly given to the optionee, in case of an option to purchase a going concern, is to have an audit made of the books of the company to determine its profits for a term of years. For the protection of the optionee, it may be provided that the owner of the property shall do nothing which might impair its value; for example, that he must keep up the insurance, discharge all taxes, interest, and mechanic's lien obligations, and maintain it in the condition which would render it suitable to the uses to which the optionee intends to put the property in case he exercises his rights under the option.

A valuable right connected with an option contract, from the standpoint of the optionee, is the right to assign the option. This is not implied but must be set forth in the option contract. If the right to assign exists, then the promoter is in an advantageous position to deal with the

proposed corporation. He can either obtain from the company the funds with which to purchase the property which he has under option, afterwards transferring it to the company in return for his agreed compensation, or he can assign his rights under the option contract to the company which can then take them up direct. It is in this way that the optionee can make sure of his profit. Bankers' ideas of the value to them of new projects are apt to be very conservative, if the promoter is not protected by option contracts, without which the bankers cannot go ahead. At best all he can expect is a small "finding commission," or a trifling stock interest. When the promoter has his options, he is in position to fight for his own hand, and to get for himself from the banker the full value of his services.

The remedy of the optionee, in case the optionor refuses to carry out his agreement to sell the property, on being notified by the optionee that he is prepared to purchase, and after the purchase price has been tendered, varies according to the ownership of the property at the time. When the property remains in the possession of the optionor, the optionee's remedy is a bill of specific performance from a court of equity. The court, on proper showing being made, will issue this mandatory injunction, requiring the optionor to transfer the property. When the property has passed into the hands of an innocent third party, however, the only remedy of the optionee is a suit for damages against the optionor. The measure of the damages may be the margin between the price named in the option and the present market value of the property. Such conveyances may be prevented by recording the option at the time it is created. The purchaser of the property is then chargeable with knowledge that certain rights against this property have been created in the option contract, and he takes it subject to a liability to have a bill for specific performance issued against him. The form of the option contract conforms with the requirements of any contract as to form and

consideration, capacity of parties, and legality of object. When stocks or bonds are optioned, the method usually adopted for the protection of the optionee is to deposit the securities in escrow; that is, in the possession of some individual or institution acting as trustee, with instructions to the depositary to turn them over to the optionee on receipt of the price. Patent options may be recorded on the books of the patent office at Washington and all purchasers of patents are required to take notice of options or assignments so recorded.

Illustration of the Option Method

Having decided to option 5,000 acres of coal land owned by perhaps one hundred farmers, the syndicate sends an agent into the district and visits these farmers at their homes. He explains his purpose to them, assures them that he will be able to raise the money to develop his proposition, and asks them for the sake of their mutual interest and for a nominal consideration in hand paid, to sell him an option to purchase their property at any time within six months at a price of, say, $50 an acre.

Various arguments may be employed to influence a general assent to this proposition. The landowners may be shown that the value of the surface soil, which will remain in their possession after the transfer of the coal, will be increased by the demands which a coal mining community will make for the produce of their farms. They may be offered the advantage of a railway which the opening of coal mines will bring. The hopelessness of developing their own property may be pointed out to them, and, as a last resort, the promoter may threaten to "sew them up" by refusing to transport their coal over his road. By employing such arguments, the promoter persuades the farmers to option or "lease" their land.

As far as possible, he keeps each owner in ignorance of the terms offered to his neighbors, for a leaking out of such

information would cause a rise of prices. In dealing with the well-to-do and intelligent farmers, he must often pay a high price for the options and the prices named in the options are also high. The promoter submits to these terms not merely because he wants the land of these hard bargainers, but also because he can use their names and influence with other owners. These higher prices are offset in part in dealing with the more ignorant landowners, who are impressed less by the representations of the promoter than by the fact that their richer neighbors have joined the scheme. The promoter may even employ coercion through an alliance with the general storekeeper who may hold chattel mortgages and judgment notes against the reluctant owners—powerful arguments when skillfully employed.

Financing the Enterprise

The proposition has now been assembled; the owners have obligated themselves to sell to the syndicate at a certain price until the expiration of the period named in the options. It is known how much the land and development will cost and the land is under the syndicate's control. The next step is to finance the enterprise. At this point a corporation is formed to take over the options. The bonds or stock of this corporation are taken by the syndicate whose members pay in a substantial portion of their subscriptions. A portion of the necessary funds may also be borrowed, the securities created being deposited as collateral for loans. The corporation, all of whose stock is owned by the syndicate, now buys the coal land, equips the mine, and starts the company as a going concern. After a record of earnings has been established, the securities of the company may be offered for sale. If the enterprise has been wisely planned and developed, these securities will be sold at prices which will repay the syndicate's original investment, and either leave them in control of the stock of the company or enable them to sell their holdings at a profit.

This represents a typical promotion. Similar enterprises are constantly being started on mines, real estate, manufacturing enterprises, railroads, water powers, irrigation and timber projects, and, indeed, every kind of business and industry. The details of each may vary from the form presented, but the essential principles are the same: (1) the securing of a right to buy an opportunity to make money; (2) the capitalization of that opportunity at a higher figure than the purchase price, plus the development cost; and (3) the sale of the stock or bonds to the investor, either directly or through the agency of middlemen, in the amount necessary to purchase and develop business opportunity. The difference represents the promoter's profit.

Nature of the Promoter's Profit

What have the promoters done to entitle them to this large profit? They have produced no coal; that is done by the company to which they turn over their options. Nor have they risked an amount of money in any way comparable to the profit which they have made. To obtain fifty options under the circumstances described may not have required an outlay of more than $5,000. Judged by the canons of conventional money-making, the promoters have done nothing to entitle them to the large profit which, out of a flotation of this importance, they frequently take. And yet the profits of the promoter are as legitimate as are the profits of any other calling, for the reasons outlined below.

The promoter is a creator of value. He brings into existence a means of producing wealth which did not before exist. By combining the control of a number of separate pieces of coal property into a fully equipped coal mining enterprise, he is able to offer to the investor an opportunity to earn, say, 20 per cent net on his money; in other words, to sell to the investor $500,000 worth of stock which can

be depended on to pay dividends of 10 per cent, for $250,000.

Without this combination, in the hands of individual owners, without transportation facilities, and without equipment, the value of this coal, based on its earning power from the small mines which produce for the local trade, did not exceed $50 per acre. Combined under one ownership, connected with a trunk-line railroad, and equipped for large operations, a value of $250 per acre is not excessive. This increase in value of $200 per acre is the result of the investment of $115 per acre—$35 in the purchase of the coal and $80 in its development. Deducting the $115 which must be spent to put the coal on the market, there remains $135 per acre as the promoter's profit which he must share with the banker and investor, a profit closely resembling the gains of the manufacturer who contracts ahead for his material and takes advantage of a rise in the market price of his product.

Why should the promoter be allowed to make this large profit? Why should it not be divided between the farmer who owns the land and the investor who furnishes the money? What is the justification for the promoter's profit?

The answer to these questions lies in the nature of the transaction. Neither the owner nor the investor can do the work of the promoter, and they have, therefore, no claim to his profits. The farmers, save in exceptional instances, could not even organize their own proposition, much less finance it. Mutual jealousies, local feuds, and overmuch information about the character and financial standing of local individuals who might undertake this work, interfere with any general agreement. It would be found very difficult to agree upon the proper price for different pieces of coal land. Farmer A, whose land lies near the creek along which the railroad is to run, would insist upon a higher value for his property than Farmer

B whose coal is farther back, while B on his part might cite as a reason for disputing the justice of A's claim the fact that his coal had been opened in several places, while nobody knew that A had any coal on his property. Farmer C, who owned land across the right of way of the proposed railroad and who therefore considered his coöperation indispensable, might insist upon a price of $150 per acre, which would probably disgruntle his less favored and jealous neighbors, and so defeat the scheme. The Brown family might refuse to go into any agreement with the Jones family, with whom one of the chiefs of the Brown clan may have had a lawsuit of some years' standing.

Some one interest acting for its own advantage and dealing independently with each owner, is essential to the assembling of such a proposition. This interest may be local and, as already noted, by means of local alliances the task of the promoter is made easier; but in most cases, the successful assembler of a proposition is the outsider who can pose as the man of wealth and connections, and can reap his harvest of options during the sunny weather of a first impression. It is the experience of promoters that an outsider of imposing personality, pleasing address, and experience in handling men, has usually much greater success in securing options than even a local "squire" or other celebrity whose standing in the community may be of the best, but who is too well known to be allowed by his neighbors to make any large amount of money out of their property.

Even if the farmers succeeded in getting their proposition together in the control of a selected committee or individual, they would have great difficulty in securing a financial connection. They would have to provide for expert reports on the property, and then to open negotiations with some financial interest with whom none of their members would be acquainted. After securing an introduction, they would present their proposition, probably in a lame

and halting manner, which would not show that they possessed a comprehensive knowledge of the importance of the property in question to the general coal market, or of the cost and conditions of its development.

Since they would have no connection with the investing public, if the banker to whom they would apply for the funds were sufficiently interested to examine the proposition and to determine its value, he might take one of two ways to further his own advantage. He would either prolong the negotiations until the local contingent lost heart and withdrew, trusting to his own ability to obtain the options for himself, or he would compel the representatives of the owners, if they desired his assistance, to accept a price not greatly exceeding the face of their options; in which event the financier would be the promoter one stage removed, and acting by deputy. The larger part of the promoters' profits on such proposition cannot be saved by the original owners of the coal.

Difficulties of Owner and Investor Promotion

The proprietor of an undeveloped opportunity is seldom in a position to bargain to advantage for its sale. His best course is to put his property in the control of some promoter at a fixed price and for a definite time, contenting himself with effecting a sale not at the price which he thinks the property is worth, but at a price which will represent a fair return on his investment of brains or money. Any attempt on his part to promote his own scheme is likely to end in failure. The failure of investors to make more money out of the sale of patents which have merit is probably due, more than to any other cause, to the fact that they insist upon an excessive interest for themselves, and are unwilling to offer sufficient inducements to those who might otherwise finance their inventions.[1]

[1] The following case is typical. In 1899, an employee of a large railway equipment concern invented an improved draft gear, the appliance which takes up the shock of impact when railway cars

It is equally impossible for the investor to secure the promoters' profits. The investor is looking for a security which will produce as large an income as is consistent with the safety of his principal. He is not likely to concern himself with the active management of these industries into which he puts his money. How much less likely is he, therefore, to abandon his regular business or profession and roam about the country in search of resources to develop. The investor, of necessity, assumes a receptive attitude. He is the customer to whom the promoter and financier offer their wares. He buys on his judgment, not only of the merits of the proposition, but also of the reputation of those who offer it for sale.

He must conclude, therefore, that the promoter performs an indispensable function by discovering, formulating, and assembling the business propositions by whose development the wealth of society is increased. He acts as the middleman between the man with money to invest and the man with undeveloped property to sell. In the present scheme of production, the resource and the money are useless apart. Let them be brought together and wealth is the result. The merging of investment funds with investment opportunities, however, is uncertain. The investor and the owner of land or patent or mine have few things in common. Left to themselves, they might never meet. The promoter brings these necessary elements together and in this way creates a value which did not exist, and which is none the less a social gain though much of it is absorbed by the promoter and the financier.

Our promoter has proceeded in the flotation of his enterprise as far as he can go without assistance. He must now

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come together. His device was recognized as of superior merit by his employers, who offered him $25,000 in cash for his patent rights, with a substantial advance in salary. This offer was refused with scorn. The inventor resigned his position, and spent a large part of his time for many years in unsuccessful attempts to finance his invention. He eventually sold his patent to the company which originally offered him $25,000, for $1,500.

obtain money to take up his options, build his factory or railroad, and start his business. He may obtain this money from the investing public to whom his appeal may be made directly, by published advertising, circular letters, and agents. If the nature of the proposition permits, he will present it to bankers and ask them to purchase a sufficient amount of the securities of his new company to provide it with the money which it requires. In nearly all cases where the proposition appeals to the conservative investor, the promoter will secure from bankers the funds which the new company requires. The bankers will purchase the securities with the expectation of selling them to the public, but, for the time being, the dealings are between the promoter and the banker.

A company has been incorporated which will hold title to the property with whose acquisition the promoter has occupied himself. This corporation will issue certain securities. These securities will be sold to the investor who will, in this way, furnish the money for the development of the enterprise.

CHAPTER III

THE BUSINESS CORPORATION

FROM this point we have to do with the corporation as an agency for the conduct of business enterprise. A comparison of the two forms of associative effort, the partnership and the corporation, will show the advantages of the corporation.

Distinctions between Partnership and Corporation

The partnership is a voluntary contract between two or more persons by which they combine their property, skill, and labor in the transaction of business for their common profit. The corporation is an association of individuals authorized by the state, under an instrument called the charter or certificate of incorporation, to transact a particular kind of business, together with all kinds of business collateral or incidental to the main line of activity, and, in the transaction of this business, to buy, sell, lease, mortgage, employ, borrow, and lend, and in all respects, for the transaction of business, act as a natural person.

The partnership, being a contract between individuals, does not merge the identity of these individuals in the association. The corporation, on the other hand, is an association with a life, a personality, a will, and a reputation of its own, altogether apart from those of its individual members.

From this broad distinction arise a number of important differences between the corporation and the partnership as forms of working business organization.

Limited Liability of the Corporation

First, as to the liability of the members. The partnership, "Jones, Brown, and Robinson, Provision Dealers," consists of these three men, in their own proper persons, joined in a business relationship. The debts of the partnership are, therefore, the debts of each member of the partnership to the full extent of his resources, all of which, not merely his share of the partnership property, but his outside property as well, may be seized in execution and sold for the payment of partnership obligations. "The Jones, Brown, Robinson Company, Successor to Jones, Brown, and Robinson," although its members are the same as the members of the partnership which it succeeds, stands between its own creditors and the outside resources of its members. These creditors, having dealt with, and trusted the *company*, must look to the *company* for payment. Since the company creditor does not recognize the individual members in the incurring of the debt, he cannot leap over the company in the process of collecting his debt, and seize the houses, lands, or personal property of the members of the company, which they hold apart from their interest in the company. All that belongs to the company the creditors can seize and sell. Its members may lose every dollar they have put into the enterprise, but the remainder of their property, because of the misfortunes of their company, they cannot lose.

This is the "limited liability" of the corporation which strongly recommends the corporate form of organization to the investor who looks for income with the minimum of responsibility. In a partnership, the investor must be always on guard lest some careless or fraudulent act of a fellow partner involve the business in ruin the effects of which might spread to his private resources. In the corporation, on the other hand, while the consequences of failure to stockholders are serious enough, yet these con-

sequences do not overflow the boundaries of the company's assets. In some cases, as, for example, in the double liability of national banking corporations, liability additional to the stockholders' interest in the company is imposed upon them, but even here the amount of liability is fixed and known to the stockholders.

Perpetual Succession of the Corporation

The second advantage of the corporation over the partnership is the respective life durations of the two organizations. The partnership, being a group of men, Jones, Brown, and Robinson, doing business as a group, can endure only so long as all of its members are alive, and so long only as each one remains solvent and willing to continue in business relations with his partners. The death of Jones, the bankruptcy of Brown, or the invalidism and withdrawal of Robinson, each will operate to dissolve the partnership and conceivably to dissolve the business. It is true that enterprises have been conducted under the partnership form for many years, lasting, in the case of the Baldwin Locomotive Works, for example, through four generations of partners, but this was due to the coöperation of several favorable factors, not always met with: prosperous business; harmonious relations between the partners, which resulted in provisions being made for the valuation and transfer of the interests of deceased partners; and the admission of valued employees into the partnership succession. The Baldwin Locomotive Works, in spite of the disadvantages of the partnership form, continued as a partnership until 1909, when it was incorporated.

A business conducted by a partnership is constantly liable to extinction. The heirs of a deceased partner, the creditors of a bankrupt partner, or a partner dissatisfied with his associates, may force, by legal proceedings, not merely a dissolution of the partnership, but the sale of all the partnership assets, even though the entire goodwill and

most of the value of the physical assets should be destroyed by this act.

No such difficulty need be feared with the corporation. The life of the corporation, a life separate from the lives of its members, can be projected, by the terms of its charter, forever. No matter what may happen to the members, the life of the company goes on and on. Every original member may die, every original member may become individually insolvent, every original member may withdraw from the association, and yet the life of the company will continue, carried on by their successors.

Blackstone's Description of the Immortality of the Corporation

Sir William Blackstone, in his *Commentaries* has described the immortality of the corporation in a passage of singular force and beauty.

> In order to facilitate business and to increase production of wealth, there have been created by acts of the public power, running back to remote antiquity, associations for business, religious, governmental, and charitable purposes known as corporations. These artificial persons are called bodies politic, bodies corporate, or corporations, of which there is a great variety subsisting, for the advancement of rights and immunities, which, if they were granted only to those individuals of which the body corporate is composed, would upon their death be utterly lost and extinct. To show the advantages of these incorporations, let us consider the case of a college in either of our universities, founded for the encouragement and support of religious learning. If this were a mere voluntary assembly, the individuals which compose it might indeed read, pray, study and perform scholastic exercises together, so long as they could agree to do so: but they could neither frame, nor receive any laws or rules of their conduct; none, at least, which would have any binding force for want of a coercive power to create a sufficient obligation. Neither could they be capable of retaining any privileges or immunities: for, if such privileges be attacked, which of all this unconnected assembly has the right, or ability, to defend them? And, when they are dispersed by death or otherwise, how

shall they transfer these advantages to another set of students, equally unconnected as themselves? So also, with regard to holding estates or other property, if land be granted for the purposes of religious learning to twenty individuals, not incorporated, there is no legal way of continuing the property to any other persons for the same purposes, but by endless conveyances from one to the other, as often as the hands are changed. But when they are consolidated and united into a corporation, they and their successors are then considered as one person in law: as one person, they have one will, which is collected from the sense of the majority of the individuals: this one will may establish rules and orders for the regulation of the whole, which are a sort of municipal laws of this little republic; or rules and statutes may be prescribed to it at its creation, which are then in the place of natural laws: the privileges and immunities, the estate and possessions, of the corporation, when once vested in them, will forever be vested, without any new conveyance to new successions; for all the individual members that have existed from the foundation to the present time, or that shall hereafter exist, are but one person in law, a person that never dies: in like manner as the river Thames is still the same river, though the parts which compose it are changing every instant.

The perpetual existence of the corporation gives it great advantages over the partnership. The corporation can enter into contracts, such as franchises or mortgages, extending over many years. It can undertake programs of construction which may require a quarter of a century for their completion. It can offer to the investor a permanent, safe resting place for his income-seeking funds.

Transferability of Interest in the Corporation

Connected with the advantage of perpetual succession which the corporation enjoys over the partnership is the advantage of transferability of interest. Any partner can force his way out of the association without the consent of his fellow partners, usually at the expiration of any year, or, at best, at the end of a short term of years, but no outsider can force his way in to replace the one who withdraws, without the consent of each one of the remaining partners.

The partnership relation is so intimate, so personal, the partners are joined so closely together in their duties and responsibilities, that unanimous consent is rightly considered to be necessary before new members are admitted. This fact makes partnership interests generally unavailable for investment purposes. Even if the investor could get his money into the partnership, which, unfortunately, is not as difficult in many cases as it should be, he will find it far more difficult to get it out again. With the rapid growth in the scale on which business is conducted, and the consequent necessity of drawing money from more people for its capital equipment, this difficulty of transferring interests counts strongly against the partnership form of organization.

The stock of a corporation, on the other hand, is divided into shares. These shares are the personal property of those who hold them, free from any limitation or restriction on the right of transfer. Any stockholder may sell his stock to any one, and all of his fellow stockholders acting together are powerless to prevent the admission into the association of the new member thus created. The way is thus opened for the free circulation of the investor's money from one corporation to another by buying and selling of stock.[1]

Representative Government of the Corporation

The final advantage possessed by the corporation over the partnership is representative government. In a partnership each member of the firm is an agent of the firm, and can bind the firm. The partners are presumed by law to trust each other in the conduct of the business, so that the words and acts of each partner have equal force with

[1] In some states, for example, Michigan, it is permissible to restrict the right of selling stock by a stockholder, by the requirement printed on the back of the certificate that stock must first be offered to other stockholders, at the price offered by others before such an offer can be accepted.

the words and acts of any other. This fact makes membership in a partnership, for any investor who is not in a position to give his personal attention to the business, extremely hazardous, since his fortune may be swept away by an ill-advised or fraudulent course of action taken by other partners without his knowledge. Personal attention to the affairs of a partnership by each of the partners is therefore essential, and, though this makes for the highest business efficiency where the partnership is harmonious and well organized, since the "eye of the master" is on every part of the business, yet it limits the number of members and, therefore, the amount of money which can be placed at the company's disposal.

In the corporation, on the other hand, we have a perfect system of representative government. A group of individuals come together under the powers given them by the corporation law of the state, and draw up a certificate of incorporation. This instrument gives the name of the corporation, its objects, the amount of capital it is authorized to raise, the location of its principal office, the period of its duration, the names and post office addresses of the original subscribers and the amount of their several subscriptions, and provisions for the regulation and conduct of the affairs of the corporation. This instrument is recorded and filed with some state officer—in New Jersey, the Secretary of State—and the subscribers thereupon become a corporation.

Constitution of the Corporation

The corporation now organizes by setting up its government to regulate its affairs. Immediately the principle of representation is applied. The stockholders select from their number certain directors or trustees to manage the business. This the law requires. There may be in time many thousand stockholders scattered all over the world, but few of these stockholders know anything about the

business owned by the corporation of which they are the owners, save as they may, in time, receive dividend checks or when their voting proxies are solicited. It is impossible, even if it were desirable, that these stockholders should come together at frequent intervals to give their attention to the management of their business. So they delegate directors to represent them. The stockholders, both in the certificate of incorporation or charter, and in the by-laws or regulations supplementary to the charter, can lay down the fundamental laws by which they wish the business of the company to be governed, just as the sovereign people in their constitutional convention change and add to the fundamental laws of the state by which the legality of every statute passed by the legislature must be tested. But having passed these laws, both people and stockholders, except on matters which they have reserved for their own decisions—such, for example, as the borrowing of money by the state, or the mortgaging of property to creditors, or the creation of new stock having priority as to dividends over existing issues, by the private corporation—must leave the decision of question of public or corporate policy to their elected representatives.[2]

Administration of the Corporation

Even the directors are not supposed, as directors, to manage the routine of the business. For example, the

[2] I recall a stockholders' meeting of the Pennsylvania Railroad Company which was enlivened by a polite and even amiable protest, voiced by Moorfield Storey, representing certain New England stockholders, against the method of selling securities to fiscal agents, at that time, Kuhn, Loeb & Company, which the Company had followed. Mr. Storey suggested that the stockholders should be given an opportunity to share in the profits of these bankers. The directors, speaking through the financial Vice President, the late John P. Green, vigorously replied that the stockholders had elected them to manage the affairs of the Company; that, in their judgment, the method of selling securities to bankers was the best; and that if the stockholders were dissatisfied, they could select new directors. Needless to say, the meeting, largely attended by holders of proxies, upheld the directors.

General Corporation Act of New Jersey in Section 12, provides that "the business of every corporation shall be managed by its directors who shall respectively be shareholders therein, or shareholders in a corporation holding 25 per cent or more of its capital stock; they shall not be less than three in number; and except as hereafter provided, they shall be chosen annually by the stockholders, at the time and place provided in the by-laws, and shall hold office for one year and until others are chosen and qualified in their stead."

However, it is further provided that "every corporation organized under this act shall have a president, secretary and treasurer, who shall be chosen either by the directors or stockholders, as the by-laws direct, and shall hold their offices until others are qualified in their stead."

These officers manage the business under the supervision of the directors, who even though they may hold weekly meetings, can do little more, in reference to the routine management of the business, than to pass upon the reports of the managers.

In this universal application of the principle of representative government to corporation management lies another safeguard for the investor. He cannot manage the business himself. He must turn it over to others to manage. These delegated representatives, however, are his trustees. The rules under which the trust is to be administered are set down in the law of the state and in the charter and by-laws of the company, and for any deviation from these rules the directors are liable to the stockholders. The law requires corporation directors to give—and the vast number of prosperous corporations proves that the directors do give—to the stockholders the benefits of honest, careful, and diligent supervision of their affairs. In the same way, directors receive faithful and intelligent service from the administrative officers of the company, to whom they must delegate not only the routine of management,

but the initiation and carrying out of important policies of construction, consolidation, and expansion.[3]

As the directors represent the stockholders, and administer the affairs of the company in accordance with the constitution of the corporation, so the officers, as the executives, represent the directors. Both officers and directors have their spheres of activity exactly defined in the charter and by-laws, supplementing the corporation law of the state, just as the public law lays down in minute detail the rules by which public officials must conduct the affairs of the state. And furthermore, just as the public legislators must go back at frequent intervals to the electors to give an account of their stewardship, so the corporation directors must obtain from their constituents, the stockholders, at even shorter intervals, approval of what they have done, and the right to continue in their positions of trust and responsibility.

Even in companies like the United States Steel Corporation and the American Telephone & Telegraph Company, with great armies of stockholders and assets running into the billions, the representative form of government, extending through the directors and officers of the parent company down through the directorates and administration boards of the principal subsidiary companies and of the subsidiaries of these subsidiaries, can expand

[3] In England it is common to compensate directors with a share in the net earnings, to stimulate their interest in the discharge of duties which would otherwise be perfunctory. In the United States, a fixed fee per meeting is the rule, which sometimes goes to high figures: $50 is common and $250 is not unknown. These fees are highly prized even by men of great wealth, and suffice to get the director to the meetings with fair regularity. Concerning the value of his advice, there are many opinions. Companies are usually run by administrative officers, and directors merely ratify their decisions. They are not in close touch with management, and aside from a conservative influence, they count for very little in the success of the company. Some companies, for example the Pennsylvania Railroad and the Standard Oil Company of Indiana, include many operating officials in their boards. Such a composition insures intelligent directors.

with the growth of the business. The corporation can indefinitely increase the number of its stockholders and the amount of its capital, without impairing the efficiency of its organization.

We have already seen how flexible is the organization of the business corporation and we now understand how complete are the powers of this association to transact business as a natural person. We have also seen how superior is the corporate form of organization to that offered by the partnership. The business corporation is the accepted form of business organization. When men come together for the prosecution of any joint enterprise, it is unusual for them to organize under the partnership form. Even in those states where laws provide for limited partnerships, wherein the liability of the partner may be confined to the specific amount he invests in the business, or where, as a silent partner, he takes no active part in the management of the business, the corporate form of organization prevails.

The Massachusetts Trust as a Substitute for the Corporation

Efforts have been made to improve upon the corporation as a form of business organization. The so-called Massachusetts trust is the favorite substitute. By this plan, certain property is transferred to trustees to hold for beneficiaries and to manage the property as active agents. These trustees may issue voting certificates of interest in the property and profits of this trust to the beneficiaries, and on these certificates dividends are paid. The holders of the certificates elect the trustees in the same manner as corporation directors are elected. The deed of trust is a close duplicate of the corporate charter. It is still an open question in some jurisdictions whether trustees under such instruments can escape the liabilities of partners. This plan is advocated primarily as a means of avoiding cor-

porate taxes, which are numerous and burdensome. It has no other substantial merit.

Selection of the State of Incorporation

The first step, therefore, in the flotation of a proposition is the organization of a corporation to conduct the business. The corporation laws of the states differ in many respects, and the first problem confronting the incorporators is the selection of a state whose corporation laws will enable them to accomplish the objects of their business in the methods which they prefer to use. The problem before the incorporators was thus stated by former Attorney-General Wickersham in a lecture delivered at Harvard University:

> In a large number, perhaps a majority of cases, the organizers of a corporation enterprise are free to select from among several, at least, of these states, the one in which to incorporate. No large business is confined to the limits of one state, although natural conditions may determine the place where mining, manufacturing or some strictly local business is to be carried on.
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> What has been termed "the legislative competition for capital" has led states like New Jersey, West Virginia, Maine and Delaware, which are not naturally great industrial and commercial commonwealths, to enact most liberal corporation laws, which have been availed of by a vast number of associations, which, in the ordinary and natural course of events would not have resorted to those states for a charter.

In Pennsylvania or Ohio, a company can be organized for only one purpose, which must be stated in the certificate of incorporation. If several lines of business are to be carried on, even though these activities are directly related, in order to accomplish this purpose in states like Pennsylvania or Ohio, separate corporations must be formed. The amount of capital which must be paid in at the organization of the corporation also differs between the different states. The liability of stockholders is another consideration. In New Hampshire, for example, stock-

holders are made jointly and severally liable for all the corporate debts until the whole capital is paid in. They are individually liable for the wages of employees in a number of states. Some states also require that directors' meetings should be held and the books of the company kept within the state. The corporation laws of some states, such as Pennsylvania, have provisions intended to secure representation on the board of the minority stockholders. It is customary, therefore, for the incorporators to select a state which gives them the greatest privileges, no matter if that state may be located three thousand miles away from the place in which they may do business.

The Foreign Corporation

In such a case, instead of doing business as a domestic corporation, they come into their state as a foreign corporation. The transaction of business in every state in the Union by a foreign corporation is now permitted by local laws. These foreign corporations must subject themselves to the same regulations as those passed for domestic corporations, and in some cases to special regulations; they must pay a license and furnish information to the state authorities as to earnings and assets for purposes of taxation on the property employed within the state. If they conform to these regulations, however, they are given the same freedom of action as that possessed by domestic corporations. In certain cases, it is true, even the most liberal states require certain kinds of business to be carried on by their own corporations. In New Jersey, for example, street and steam railroad, gas and electric light, telephone and telegraph companies, banking institutions, and, in general, all corporations with the proper conduct of whose business the general public, as distinct from a limited number of customers, is concerned, and all of whose operations should be under the direct control of the state authorities, must be incorporated under New Jersey laws. All other kinds

of business—trading, manufacturing, mining, lumber, and agricultural—may be carried on by corporations organized in any other state.

Having selected the state whose corporation law seems best adapted to their purposes, the incorporators proceed to work out in their charter and by-laws a financial plan, which, when carried out, will place at the disposal of the new company the money or property which it requires, and which shall give suitable recognition, in the distribution of profits, the right to vote for directors, and on other matters, to those who contribute this capital.

CHAPTER IV

MATERIALS OF THE FINANCIAL PLAN: MANAGEMENT, STOCK

A CORPORATION is an association of individuals authorized to own property, to contract debts, to appoint officers and agents, and to manage its business within the limits of its formal grant of authority by the state, known as its certificate of incorporation or charter, in all respects as a natural person. The association owns the property. The stockholders own the association. The stockholders are represented in the management of the business of the association by trustees known as directors. These directors, while transacting the most important business themselves, appoint administrative officers who carry on the work of business management.

Nature of Corporation Stock

The ownership or property interest in this corporation is called the stock of the corporation. This stock, for purposes of convenience in distribution, is divided into shares. It has long been the custom to represent this stock ownership in the corporation by a certain sum, such as $500,000 or $1,000,000, or in the case of the American Telephone & Telegraph Company, $1,856,125,200. The sum is presumed to be the amount of capital, that is, the property or money which has been contributed to the corporation to equip it for the transaction of business. This capitalization is divided into shares each of which, being a proportionate part of the total, represents an assumed sum of money. This assumed sum is known as the par value. If the capital

stock of the company, for example, is $100,000, and is divided into 1,000 shares, then the assumed or par value of each share is $100. If the capitalization is divided into 10,000 shares, the par value of each share is $10 and if, as sometimes happens, it is divided into 1,000,000 shares, the par value is $.10. The first step in the preparation of the financial plan is to fix a certain capital which shall represent the ownership in the company. The considerations affecting the amount of this capitalization will presently appear.

Stock without Par Value

It is not necessary that shares of stock shall have par value. Many states, including Pennsylvania, New York, Illinois, and Ohio, authorize the issue of shares without par value. When this method of issuing shares is used, instead of setting forth that the capital stock is $100,000 divided into 1,000 shares of $100 each, the offering is made of capital stock, divided into 1,000 shares. The value of stock without par value may be settled by a resolution of the board of directors or by the subscription price. In some states, the law provides that a minimum amount of cash must be paid for each share. There is no necessary connection between the figure on the par value stock certificate and the value of the shares. The value of the shares depends upon the earnings of the company. These earnings, while to a large extent dependent upon the amount of money or property contributed, primarily depend upon the ability with which the property is managed by the directors and officers of the company. They are also influenced by the general business conditions of the country, and those affecting the particular industry in which the company operates, as, for example, when the Victor Talking Machine Company lost $5,000,000 in one year through the competition of radio.

For all practical purposes, shares of stock without par

value serve as well as par value shares. The holders of no-par-value stock receive dividends at the rate of a certain number of dollars per share. The percentage form in which announcement of a dividend on par-value stock is usually made is of no practical consequence. The holders of shares without par value can vote and participate in the proceeds of liquidation. All the rights of stockholders are theirs. If they desire to offer their stock for sale, their shares will be valued exactly as any other kind, on the basis of profits and dividends.

These shares of stock or ownership may be sold to provide funds for the company. In private corporations, such as manufacturing and trading companies and financial institutions, this is the usual method. The company is capitalized for the amount of money which is required and those who desire to participate in the enterprise purchase varying amounts of stock. The method is to circulate a subscription agreement by which the subscribers bind themselves to purchase certain numbers of shares. This agreement can be enforced against delinquent subscribers by the processes of debt collection.

Rights of Stockholders

The rights of holders of these shares will now be described: First is the right to vote for the directors of the company, and on all matters which the charter or laws of the state declare shall be submitted to a vote of the stockholders—for example, the sale of the property of the company, the issue of a special class of stock, the placing of a mortgage on the property of the company, or the dissolution of the corporation. In large public corporations, the stockholders are so widely scattered that it is not possible for many of them to attend meetings of the corporation. Provision is made in the law for them to vote even though absent. The political elector until recent years must go personally to the polls to deposit his ballot. This pro-

vision has now been amended in certain states to allow voters absent from the state to cast their ballots by mail.

The stockholder, however, by signing a written power of attorney, called a proxy, may authorize any one designated in the proxy to vote the number of shares which he owns. The proxy need not be in any particular form. A telegram has been held to be sufficient. It may convey to the attorney a general power to vote the number of shares in the proxy, or it may designate the person for whom the holder of the stock desires his vote to be cast. A proxy may be revoked at any time before the election and a new proxy issued to another attorney or the stockholder himself may appear in person and cast his vote as he pleases.

The rule is that the ownership of one share of stock entitles the holder to one vote, but this rule can be modified in any way that the incorporators may desire. They may provide, for example, that one share equals one vote up to 100 shares; from 100 to 200 shares, two shares equal one vote; and from 200 to 500 shares, three shares equal one vote; the purpose being to reduce the voting weight of large stockholders. Such provisions are to be found in the corporation laws of some states.

In the absence of special provisions to the contrary, in corporation elections as in political elections, the majority rules. This majority, since it is a majority of stock and not of individual votes, may consist of one man. This stockholder may be arrayed against 100,000 other men who, because their collective stock holdings are one share less than half the total number of shares, are powerless to influence the policies of the corporation by their vote at stockholders' meetings. It is to prevent such exercise of authority by a few stockholders over a large number of individuals holding a minority of shares, that the provisions just indicated have been devised.

In theory there can be no such persons as "majority directors." Directors are supposed to represent all the

stockholders without distinction, and to act with an eye single to the best interests of the company. In practice, moreover, this ideal is generally realized. Honest men, however, frequently differ on the advisability of policies, and their opinions are deeply colored by their interests. For example, for many years, members of a family controlled the Midvale Steel Company. They held the offices, drew the salaries, and paid no dividends. The minority drew no salaries. They had invested their money but could get no return. In such cases, a courageous and ready man elected to a board by minority vote can often act very effectively to moderate the excessive conservatism of the majority. Especially when companies are controlled by other companies which have business dealings with them, it is important that minorities interested only in the one company should be able to review the terms of intercompany contracts. A long term price for coal, for example, might look reasonable to the buyer who elected a majority of the directors of the selling company, while to the minority it might appear, and might in fact be, unconscionably low. Minority representation in such cases can often protest effectively against honest but stupid favoritism.

Cumulative Voting

A more familiar restriction on the power of the holders of the majority stock undertakes to secure for the holders of the minority a sufficient representation on the board of directors to enable them to know what is going on so that they may act promptly if their interests are endangered by any act of the majority directors. This method of protecting the rights of the minority is known as cumulative voting. It is thus described in Section 35a of the Corporation Act of New Jersey:

> The certificate of incorporation, original or amended, of any corporation now or hereafter organized under the laws of this

state, and thereunder issuing or authorized to issue shares of its capital stock, may provide that at all elections of directors, managers or trustees, each stockholder shall be entitled to as many votes as shall equal the number of his shares of stock multiplied by the number of directors, managers or trustees to be elected, and that he may cast all of such votes for a single director, manager or trustee or may distribute them among the number to be voted for, or any two or more of them as he may see fit, which right, when exercised, shall be termed cumulative voting.

Suppose, for example, that there are 100 shares of stock outstanding and five directors to be elected. The holder of twenty shares of stock may vote as follows when cumulative voting is provided: he may cast twenty shares of stock for directors, A, B, C, D, and E, or in case he finds himself in the minority and desires to secure the election of at least one director who will represent his interests and keep him posted, he may elect to cast 100 votes, which equals the number of shares he owns times the number of directors to be elected, for director E or he may cast 50 votes for E and 50 votes for C. When cumulative voting is provided, it is impossible for a stockholder owning one-fifth of the stock of a company having five directors, to be denied representation on the board. He is certain to provide a clear majority for his candidate.

The Voting Trust

Stockholders may centralize the control of a company by establishing a voting trust. When this is done, the necessary number of shares, usually not less than a majority, and the entire number of shares outstanding if the holders of these shares desire to enter the trust, are transferred to trustees, usually three or five in number, who thereafter are the legal owners of the stock, holding the voting power. In return for these shares, so transferred to them, the trustees issue voting trust certificates corresponding in number of shares and in allotment of shares to

the number and division by registered owners of the stock deposited. The depositor of 100 shares of stock, for example, will receive a voting trust certificate stating that 100 shares have been deposited with the trustees under the provisions of the deed of trust. These certificates are registered, just as the original shares of stock, in books kept by the trustees, and are transferable in the same manner as shares of stock. They may be listed on stock exchanges and freely dealt in. They may also have voting power, *to elect trustees,* but they have no voting power to vote the stock deposited. If the stock pays dividends, the trustees, after deducting their compensation, and to the extent that they are authorized by the instrument, distribute these dividends which are received by themselves in the first instance, as the legal owners of the deposited stock, to the holders of the certificates as their several interests may appear on the books of the trustees.

Voting trusts are established when it is desired to make a stock control permanent: *e.g.*, when a group of stockholders controlling a corporation wish this control to continue after they die; or when a group of stockholders wish to sell their stock at a certain price, which may in their opinion be more easily obtained by placing it in the hands of trustees with power to sell; or when a court orders a company to dispose of its illegally held stock; or when a company has been reorganized after insolvency, by bankers who wish to provide for proper administration of its affairs, until it is again firmly on its feet.

Non-Voting Stock

Many corporations in recent years have issued large amounts of stock without the voting power. Dodge Brothers, National Cash Register, Goodyear Tire are examples. Control may be vested in management stock or in a special class of regular stock.

This voluntary disenfranchisement of stockholders has

been severely criticized by Professor W. Z. Ripley of Harvard University,[1] as opposed to the public interest and opening the door to fraud and tyranny. As a result of this criticism, which has been embodied in the stock-listing provisions of the New York Stock Exchange, the issue of non-voting stock has been generally abandoned. The New York Stock Exchange does not formally bar non-voting stock. It merely indicates that it will take this fact—that the stock is non-voting—under advisement when passing upon the application for listing the stock. This statement is sufficient to warn off non-voting stock applications. There is apparently no good in the disenfranchisement of the stockholder, even though he consents to it by purchasing non-voting stock, and it may lead to grave abuses. The Interstate Commerce Commission in 1926, in rejecting the plan submitted for consolidating the Chesapeake & Ohio, Nickel Plate, Pere Marquette, and Erie Railroads, which plan involved the disenfranchisement of 951 shares of voting preferred stock, made the following comment on non-voting stock:

> We believe it to be self-evident that the public interest requires that the entire body of stockholders of a railroad which is bonded in excess of one-half of its investment, and not a powerful few, shall be responsible for its management. This can be done only by giving them the power to control the management. The lethargy of ordinary stockholders in exercising their power to control the management of these large corporations has often been commented on, but nevertheless, the power should be in their hands to use as they see fit. It is inimical to the public interest to strip stockholders of their voting power, thus rendering it so much easier to control a great transportation system by a comparatively limited amount of investment.

Obligations of Directors to Stockholders

Stockholders have the right to be faithfully represented by directors. Directors must not speculate with the funds

[1] William Z. Ripley, *Main Street and Wall Street* (Little, Brown & Co., 1927).

or credit of the company; they must not, without the consent of the stockholders, expressed or implied, be parties to any contract with the corporation, and they must exercise good faith to the stockholders in all their dealings. Directors must answer to stockholders, not only for acts of commission, but for negligence in caring for the interests committed to their charge. These obligations of directors are very real obligations and are taken seriously by honorable men. James J. Hill, for example, who was a director of the Great Northern Railroad Company, in a transaction carried out for the benefit of his company in connection with the purchase of ore lands, a transaction described in detail in a later chapter, refused a profit of at least $30,000,000 which he could easily have made, and turned this profit over to the stockholders of the Great Northern. As a stockholder, he properly shared in this profit to the extent of his holdings. As a trustee for the stockholders, however, he did not profit. On the witness stand, when questioned about this transaction by an importunate and obtuse Congressman, he summed up in a brief sentence the whole duty of a man on a board of directors: "I felt it worth my while to have clean hands."

The author knows of a case in which a consolidation of two banks was pending, a fact unknown to the mass of stockholders, which was certain to add to the value of the stock concerned. The president of the larger institution, the late James N. Wallace, of New York, did not purchase any stock although, by so doing, he could have made a large profit. As an illustration of the contrary practice, the act of a prominent railroad president in the early years of the century, in borrowing a large sum from his own company on insufficient collateral, was one of the principal reasons for his being summarily ousted from his position by the stockholders.

The obligations of a trustee, which are assumed by a corporation director, are obligations which, in their bind-

ing sacredness, are superior to all others. They cannot be secretly violated without loss of self-respect. A pure heart may be an ideal beyond the reach of poor, erring humanity, but the ideal of clean hands can always be attained.

Directors of American corporations usually serve without any compensation other than a small fee for attending meetings. There is no legal prohibition against paying them stated or contingent salaries. Directors of English corporations are often compensated on the basis of earnings. This system could profitably be introduced in the United States.

Stockholders have the right to participate in the profits of the company, when the directors decide that these profits have been earned and that it is expedient to distribute them; and to share in the proceeds of the assets of the company in case of dissolution or liquidation. These rights of the stockholder are set down in the certificate of incorporation or charter. The incorporators themselves draw up this certificate under the general incorporation law of the state. When duly authenticated, recorded, and filed with the proper official, it becomes the charter of the company, the evidence of its right to be a corporation, the fundamental contract between the state and the corporation, between the corporation and its stockholders, and between the stockholders themselves, a contract which cannot be changed without the consent of a substantial majority of the stockholders.

Classification of Stock

In but few cases can a public business corporation be financed in such a simple manner. When the appeal is made to the public to supply funds, a more elaborate financial plan must be devised, dividing the stock into two classes, preferred stock and common stock, or, as the English describe it, ordinary stock. Preferred stock has preference in the distribution of profits, and, if provided in the

charter, preference in any distribution of the assets of the company to stockholders. If a company issues 50,000 shares, the owner of 5,000 shares is the proprietor of one-tenth of the corporation. In the absence of some special provision to the contrary, he can exercise one-tenth of the voting power. If the directors declare a dividend out of the profits of the company, this distribution is made to the stockholders on the basis of the number of shares held by each. For example, if the sum distributed is $50,000, the holder of 5,000 shares would receive $5,000. If the company is dissolved and its assets bring $500,000, the holder of 5,000 shares would receive $50,000. This would apply, no matter what the capitalization of the company might be, or into how many shares it might be divided. Whether the capitalization is $5,000,000, or $50,000, or the par value $100, or $1, the position of the stockholder in participation in dividends and in assets is the same.

This holds true if only one class of stock is issued. If preferred stock is issued, two classes of owners are created: (1) preference shareholders, who receive a certain rate of dividends, usually 7 per cent on the par value of their shares, which must be paid them out of the profits distributed before the holders of the common stock can receive anything; and (2) common stockholders, who take what is left after the claims of preferred stockholders have been satisfied. The advantage of the preferred stockholder is that he has a prior claim upon the profits of the company, a claim inferior, it is true, to that of the creditor, but which takes precedence of the common stockholder. If the profits of the company are only sufficient to pay 7 per cent on the par value of the shares, and in case the directors decide to distribute these profits, the preferred stockholder will receive his 7 per cent, while the common stockholder will receive nothing. It may also be provided in the contract between the corporation and the preferred stockholder that he shall participate equally with the common stockholder

in any distribution of profits, until a certain additional amount of return on the preferred stock has been paid; or this participation with the common stock may begin after a certain dividend has been paid on the stock, after which both classes of stock share equally in profits; or the participation of the preferred stock with the common stock may be unlimited from the beginning.[2]

Classification of Preferred Stock

Preferred stock may be classified into cumulative and non-cumulative. In the charters of companies issuing preferred stock, the following provision is usually found: "The dividends upon the preferred stock shall be cumulative so that if, in any year, the dividends amounting to 7 per cent per annum, are not paid on the preferred stock, the deficiency is payable subsequently before any dividends are set apart or paid on the common stock." If the earnings of a corporation in a certain year are only sufficient for the distribution of $1,500,000, while the dividend of 7 per cent on the preferred stock calls for a distribution of $2,000,000, in the following year, the preferred stockholders, in addition to their regular dividends of $2,000,000, must receive the $500,000 of dividends which they failed to get in the preceding year, before the common stock can receive any dividend. No matter to what sum these unpaid dividends on the preferred stock may amount, all these back dividends must be paid in some form to the preferred stockholder before the common stockholders receive anything. Preferred stock may be divided into series, according to the order of preference, as first, second, and third preferred, and payment of current and accrued dividends must be made in the order of preference.

[2] For example, 7 per cent may be paid on the preferred stock, then 6 per cent on the common, then 3 per cent on both preferred and common, after which all increases in the amount distributed goes to the common stock.

Preferred stock may also be preferred as to assets in dissolution or liquidation by the following provision:

In the event of the liquidation or dissolution, or winding up (whether voluntary or involuntary, or by the expiration of the period of corporate existence) of the company, the holders of the preferred stock shall be entitled to be paid in full all dividends theretofore unpaid, and the par value of such preferred stock; and after such payments shall have been made the common stock, to the extent of its par value, plus all dividends, if any, to the extent of _____ per cent per annum, which the company theretofore may have failed to declare and pay, shall be paid in full from such assets as remain and any surplus then remaining to the amount of _____ dollars shall be distributed among the holders of said stock; and all surplus, if any, remaining thereafter, in excess of said amount shall be distributed among the holders of the preferred and common stock, share and share alike.

This provision is intended to guard against the danger involved in the following situation. A company, largely in arrears in its preferred dividends, and with its common stock selling at a low figure, may be favored by a large increase in the value of its properties. If the preferred stock is not preferred as to assets, the holders of the common stock may buy enough of the preferred to give them the majority necessary to dissolve the corporation and distribute the assets. The outcome of this transaction might be that the common stockholders would make a large profit at the expense of the preferred stockholders. Such a speculation is made impossible by a provision such as the above.

Preferred Stock Sinking Fund

A sinking fund is often provided for the retirement of preferred stock at a premium. This fund is usually a percentage of net earnings remaining after the payment of dividends on preferred stock. If a dividend has been paid on the common stock, this amount to be applied to the

purchase of preferred stock may be increased. The sinking fund provisions are now almost universal. This provision does not compel the corporation to pay a certain annual sum to the holders of the preferred stock. Such payments are contingent upon profits. Assuming, however, that the profits are earned, the obligation to redeem a portion of the stock is unconditional, although it cannot be enforced if payment would endanger the solvency of the company.

Protection to Preferred Stock in Asset Account

The preferred stock contract may provide that a certain surplus shall be maintained at all times, and that the net current assets shall be kept at a certain ratio to the preferred stock, failing which no dividends shall be paid on common stock. These two restrictions aim (1) to insure the preferred stockholder against a dividend policy too liberal to the common stock, and (2) to guard the preferred stockholder against an overinvestment of profits in plant and equipment by which the liquid assets of the company would be so much reduced as to force the directors to borrow too large an amount of working capital. Observe that until this second requirement has been met, no dividends shall be paid upon any class of stock. The operation of this clause will result in an accumulation of dividends on the preferred stock.

Special Voting Powers to Preferred Stock

Special voting powers may be conferred on the preferred stock. For example: "the holders of first preferred stock shall elect one-third of the board of directors and shall have in addition full voting rights on all matters by the charter reserved for the determination of the stockholders. The remainder of the directors shall be elected by the holders of the second preferred stock and common stock."

Veto Powers of Preferred Stock

It is also usual, for the preferred stockholder's protection in the security of his income and capital, to impose certain restrictions on the directors in their management of the corporation.

Without the consent expressed in writing of three-fourths of the holders of both classes of preferred stock, the corporation shall not: (*a*) create any lien or mortgage upon any of the real or personal property of the company; (*b*) make any change in the voting powers of any class of stock; (*c*) sell all or substantially all of the property of the company; (*d*) sell any part of the real estate or securities of the company without investing the proceeds in new property of a similar character, acceptable to ——; (*e*) make any increase in the authorized amount of either class of preferred stock, or create any stock issue priority to the first preferred stock; (*f*) authorize the increase of either class of preferred stock, and even with the consent of the holders of three-fourths of each class of preferred stock, authorize any increase in such issue unless the earnings for the preceding fiscal year are ——; also unless all arrearages of dividends on the class of preferred stock that it is proposed to increase shall have first been discharged; (*g*) issue any bonds or notes maturing more than one year from the date of issue; (*h*) change the voting power of either class of preferred stock.

The purpose of these restrictions is to secure the preferred stockholders adequate representation on the board of directors, and to give them a veto on any acts of the corporation which they may consider injurious to their interests, especially additional issues of preferred stock or bonds which might dilute their interest. The three-fourths percentage is that usually selected. A larger amount would open the door to unfair obstructive tactics by a small minority. A bare majority might act unfairly to a large minority. Whatever course of action meets the approval of holders of three-fourths of the preferred stock will usually be wise and fair. Additional restrictions may limit the compensation of directors to a per-

centage of gross sales or net earnings, or may give the preferred stockholders a veto on the payment of aggregate salaries above a certain amount. It may further be provided that the consent of a majority of the preferred stock is required to authorize the pledging as security for a loan of any of the quick assets of the company, or the leasing of its property, or the placing of its endorsement on any notes. This is aimed to guard against a practice which has involved many corporations, once prosperous, in serious embarrassment. Claims arising out of the contingent liability of the guarantor come before the preferred stock, whose interests are protected by the grant of this right of veto.

Classification of Directors for Benefit of Preferred Stock

For the purpose of securing permanence of control by representatives of preferred stockholders at a certain date, classification of directors may be provided; for example:

> The directors of the company shall be divided into three classes. The directors of the first class, numbering one-third of the total number of directors, shall be elected for a term of five years by the holders of the first preferred stock. The directors of the second class, also one-third of the total number, shall be elected for a term of two years by the holders of the second preferred stock. The remaining directors for the company, composing the third class, shall be elected for a term of one year by the holders of the common stock.

It is impossible, with this provision in force, to make a sudden change in a company's policy; for example, to embark on a campaign of price cutting, or lavish advertising; or to abandon or establish branch establishments; or to borrow large sums, by purchasing control of the company, and summarily ousting at the next election a board who may not be in sympathy with these ideas. With this classification of directors in force, two elections must be held before the new control can secure a firm domination

of the board, and, within that time, the new proposals can be thoroughly examined and any weakness disclosed.

Remedies of Preferred Stockholders when Protective Covenants Are Violated

When any of the foregoing covenants are broken, or if dividends on the preferred stock are in arrears, a drastic remedy is provided:

In case of a breach of any of the foregoing covenants by the corporation, it is agreed with the holders of the preferred stock that at the next election all the votes for directors whose terms then expire shall be cast by the holders of the first preferred stock; and that at the second election next succeeding such breach of covenant and restriction, all the votes for directors whose terms shall then expire shall be cast by the holders of the first preferred stock so that after the second annual election all the directors of the company shall have been chosen by the holders of the first preferred stock. And it is further agreed that the terms of such directors shall be equal to the terms of the directors by the preceding section required to be elected by the holders of the first preferred stock, so that in case any of the foregoing restrictions or covenants shall be violated within one year thereafter, the entire board of directors shall be chosen by the holders of the first preferred stock.

And it is further agreed that the exclusive voting power, not only for directors but on all other matters by law reserved to the stockholders, so long as the above mentioned breach of covenant may continue and for one year thereafter, shall reside and be vested in the said holders of the first preferred stock, and it is further agreed that the report of the auditors of the company as to the observance of the above described covenants and conditions shall be conclusive as to the fact of their breach or observance.

Of all provisions for the protection of preferred stock holders' rights, this is the most valuable. Control of a corporation is a vital matter to those who possess it. Prestige, personal credit, salaries, and other emoluments all go with control. With this provision inserted in his contract the preferred stockholders may be reasonably

assured that if earnings are available to pay preferred dividends, these will be paid before the arrearages approach the point when control will be lost. Other protective provisions are valuable or not according to circumstances. This provision for the forfeiture of voting power, under all conditions, is of the greatest value to the preferred stockholder.

Right of Redemption

A provision in preferred stock contracts which is frequently met with is the right of redemption at a premium. If the company is prosperous and has available funds, it may reserve the right, common also in bonds, to retire its preferred stock, saving the preferred dividend and also freeing the common stock from the irksome restrictions and privileges which the preferred stockholder demands. The premium, usually 8 per cent or 10 per cent, is to compensate the preferred stockholder for his loss in surrendering a desirable investment.

In concluding this discussion of preferred stock, I desire to emphasize a fact which is too often lost sight of. Preferred stock is always and everywhere stock, a representation of ownership in a company. Its value is only comparative. It is better than common stock, but that is all. Compared with a bond, preferred stock is inferior. Its dividends cannot be collected by legal process against the decision of the board not to pay them. Its sinking fund rights disappear in the face of unpaid debts or unfulfilled provisions to pay debts. The claims of its "accumulated" dividends are valueless except when compared with common stock claims.

A variation of the distinction between preferred and common stock is found in the growing use of A and B stock. An illustration of this stock is shown in the following description of the stock of the International Utilities Corporation:

Class A stock is entitled to receive ordinary cumulative dividends of $3.50 per share per annum before any dividends can be paid on Class B stock. In any year in which dividends at the rate of $3.50 per share have been paid or provided for Class A stock, then a dividend at the rate of $1.00 per share per annum may be paid on Class B stock. Whenever in any year the foregoing dividends have been paid or provided for, then all subsequent dividends declared or paid in such year shall be so declared and paid upon the Class A and Class B stock, share and share alike, until Class A stock has received a participating dividend of $1.50 per share, making a total dividend of $5.00 per share for such year, and then all subsequent dividends in such year shall accrue to the Class B stock.

Here is a distinction without a difference. Class A stock is cumulative, participating, preferred stock, and Class B stock is common stock. The new characterization is for marketing purposes. Class A sells as well as preferred stock and Class B sells better than common stock. Hence the change in labels. The letters of the alphabet do not differ from each other in repute. A and B do not immediately suggest the inferior position of B, while "common" always carries an invidious suggestion of inferiority.

CHAPTER V

DEBENTURES AND INCOME BONDS

Definition of a Bond

Corporation bonds are promissory notes, usually in denominations of $500 or $1,000, and each note is evidence of a proportionate interest in the same debt, $1,000,000, $50,000,000, or $300,000,000, as the case may be. The evidences of these large debts are issued in a number of notes, in order that they may be readily marketed. A corporation wishing to borrow $1,000,000 for twenty years, even on the best security, would have difficulty in placing the entire loan with a single investor. No matter how good the security, few investors have funds sufficient to provide for a loan of this amount. By issuing, instead of one note for $1,000,000, one thousand notes of $1,000 each, the corporation is able to draw upon the money of a large number of investors who may buy its notes in lots of one, five, or fifty.

The Trustee

The division of the debt into a large number of "pieces" necessitates the intervention of a "trustee" who will represent the owners of the bonds in all negotiations with the debtor company. The trustee takes the place for the bondholders that the company organization holds for the stockholders. Without this representation, it would be necessary for the bondholders to organize a corporation to hold the property. This corporation would elect directors, who would elect officers to represent the body of creditors.

Debenture Bonds

Corporation bonds are either "plain bonds" known as debentures, or income bonds (these first two types being long term promissory notes); or secured bonds. We shall take up these divisions in order.

An illustration of a debenture is an issue by the New York, New Haven & Hartford in 1904, which is in substance as follows:

Fifty years after date, the New York, New Haven & Hartford Railroad Company promises to pay ———— or order, $1,000 at the office of the Treasurer, in the city of New Haven, Connecticut, and to pay interest thereon at the rate of 3½ per cent per annum.

Income Bonds

Debentures differ from income bonds. An income bond is one whose interest is payable if it has been earned, but whose principal, like that of any other bond, is payable at a definite date. The advantage to the issuing company lies in the fact that if interest is not earned, the company cannot be annoyed by the legal action of creditors pressing for payment. It is necessary, however, from the standpoint of the purchasers of these income bonds, that the earnings out of which their interest is payable should be precisely defined. The borrowing company is allowed full operating expenses before net earnings available for interest are calculated, but, from these expenses, all improvement expenses and all outlays for new property are excluded. These expenditures are considered as profits held in the business, and the company can be forced to pay interest on income bonds up to the amount of earnings so applied to its property. Interest on income bonds is preferably cumulative, resembling in this respect, dividends on cumulative preferred stock. If not earned in one year, it is carried over as an absolute claim on any future ac-

cumulation of earnings, and must be paid when earnings are available. An income bond gives the holder the protection which can be afforded by the earnings. An income bond is, however, not as good as a debenture from the standpoint of security, since the debenture bondholders can sue the company for unpaid interest.

The Mortgage Provision

Contracts with debenture bondholders may contain certain special security. It may be provided that no mortgage shall be placed upon the property unless the debentures are included in the lien of the mortgage. Thus, for example, in the offer of the debentures of the New York, New Haven & Hartford appears the following:

> These debentures also provide that if this company shall thereafter create any mortgage upon its now existing main lines of railroad . . . such debentures shall be entitled to share in the security of such mortgage pro rata with any other obligations that may be secured thereby.

Limitation of Indebtedness

It may be provided that as long as the debentures are outstanding, the debt of the company shall not be increased. The agreement with the debenture bondholders of the Colorado Fuel & Iron Company provides that:

> So long as any of said debentures shall be unpaid, no mortgage or other encumbrance shall be placed upon any of the property of the Iron Company, nor shall any other debentures be authorized or issued, nor any other bonds . . . it being the meaning of this agreement that neither the total amount of bonds at any time outstanding nor the rate of interest thereon, so long as any of said debentures shall be unpaid, shall be increased; nor shall any notes be issued or indebtedness authorized or created for any other purpose than the ordinary running expenses of the Iron Company.

The precautions indicated in the foregoing extract are highly desirable from the standpoint of the debenture

bondholder. A corporation which has issued debenture bonds may have retained the right to issue bonds under its various mortgages, which are liens on the property ranking ahead of the claims of debenture bondholders. By further issues of bonds on these properties, the security of the debentures, which can be paid only after the prior claims of mortgage bonds have been met, might be impaired. By inserting in the contract with the debenture bondholder such a provision as the foregoing, a corporation, so long as the debentures were outstanding, would be unable to issue any other form of debt than short term notes or an inferior grade of debentures. The amount of its mortgage-secured debt would be fixed.

Specific Expenditure of Proceeds

It may also be provided for the protection of the debenture bondholders that the proceeds of these bonds shall be expended in a specified manner for the benefit of the property. To quote again from the agreement of the Colorado Fuel & Iron Company:

> The Iron Company agrees that the proceeds of the initial $10,000,000 of said debentures shall be used only for additions and improvements to the plant of the company, and for working capital and other corporate purposes, and that the proceeds of the remaining $5,000,000 of said debentures shall be used only for the acquisition of additional property.

It would be impossible, in view of this clause in the contract, for the proceeds of the debentures to be used to retire outstanding indebtedness of the company, or as a means of providing funds for the payment of a dividend to stockholders out of company surplus. The provision stipulates that all the money which the purchasers of the debenture bonds pay into the treasury of the company shall be so expended as to increase the value of its property and the earnings upon which the debenture

bondholders must rely for their interest. With these safeguards, the position of the debenture bondholder is not greatly inferior to that of the holder of a second mortgage bond.

Another restriction for the protection of the debenture bondholders is a covenant to keep intact the financial structure of the borrowing company. For example, the North American Edison Company, a holding company, in its indenture securing its A debenture bonds, provides that the company may not sell so much of the voting shares of certain important subsidiaries as would result in reducing its holdings below two-thirds of these voting shares, unless all the voting shares are sold, and, in that event, the entire proceeds of the sale are to be applied to the retirement of these debentures. No pledge of any of the shares owned shall be made "without securing these bonds equally and ratably with the obligations secured by such mortgage or pledge."

The borrowing company may finally protect its debentures by a limitation on dividends, and by preserving a certain margin of current assets and total assets. The Paramount-Famous-Lasky Corporation, for example, in the indenture securing $16,000,000 of debentures agrees to pay no dividends (except stock dividends) unless its consolidated net earnings (including the net earnings of companies in which it owns 85 per cent interest), or the average of such earnings for the past three years, shall be at least twice the consolidated interest charges of the corporation and its subsidiaries, and unless current assets shall be at least twice current liabilities, and total assets one and one-half times total indebtedness after the payment of such dividends.

Convertible Debentures

In order to make debenture bonds more attractive and to sell them at higher prices, many corporations have adopted

the plan of making these bonds convertible into stock at a certain figure. These convertible debentures are direct obligations of the issuing company. They carry a fixed rate of interest and are payable at a definite date. In addition, the holders of the bonds are given the privilege of converting them into stock, usually common stock, at a certain figure, either up to a certain date or after a certain date. The conversion price is usually fixed at a figure considerably above the market price of the stock when the bonds are issued.

The advantages offered by these bonds to the investor are evident. Convertible bonds, considered as obligations, rank with second mortgage bonds. A company which has a long dividend record is reasonably certain to pay interest and principal of its junior mortgage bonds. The stock of the corporation represents the residual claim to the increase in its profits and values. If the business of the company is well conducted, the stock may go to a high price. The holder of the convertible bond can then make a profit by exchanging his bonds for stock.

The securities of new public corporations, if successful, usually go through a period when they are in the hands of speculators: persons who hold them not for income, but to make a profit on their advance in price. At one time, during its early history, over two-thirds of the common stock of the United States Steel Corporation was in brokerage offices, held for the account of speculators. This speculative demand is of great importance in sustaining the value of securities. A feature connected with convertible bonds which makes them attractive to the speculative element, always considered in any sale of securities, is the movement of their value as compared with the movement of stock values. Since the convertible debenture is a bond, an unconditional obligation of the corporation to pay money, it will be valued as a bond and there will be a point below which it will not fall. The purchaser of

a 5½ per cent debenture bond of a strong railroad company at, say, 95 can be reasonably certain that, no matter how unfavorable the financial situation may be, the price of his security will not fall below 85. The stock of the same company, although it may pay a higher dividend than the rate of interest on the bond, may easily fall to 75. On the other hand, when the price of the stock advances, the convertible bonds, since they are exchangeable for the stock, also rise more rapidly than other junior lien bonds which do not have the conversion privilege. The Atchison, Topeka & Santa Fe, in 1907, had outstanding a large issue of convertible 4 per cent bonds as well as a second mortgage 4 per cent bond, known as Adjustment Mortgage 4 per cents. During the panic of 1907, the adjustment mortgage 4s fell to 77½ and the convertible 4s to 80. With the revival of business, the stock of the Atchison rapidly advanced, and the convertible bonds rose. On November 24, 1909, the convertible 4s sold at 119½ while the adjustment mortgage 4s had only recovered to 94½.

Up to and beyond the conversion figure, as long as any of the convertible bonds remain outstanding, the price of the bonds and of the stock into which the bonds are convertible will move together. Convertibles, however, usually sell at a lower price than the stock for which they are exchangeable because the main reason for buying them is to obtain the stock cheaper by exchanging the bonds than by direct purchase. The correspondence, however, between the price movements of convertible bonds and stock is sufficiently close to make these bonds very attractive to a large class of investors who are not averse to taking a speculative profit if this can be done with moderate risk.

Convertible Debentures as a Hedge against Short Sales

Convertible bonds are also bought largely by speculators as a protection against short sales. Suppose, for example, a speculator desires to sell a stock short around par. He

begins his operations by buying ten of the convertible bonds which will be selling around 98½. The same corporation has issued debentures convertible into the stock at par. He then sells 100 shares short, borrows the stock, and deposits his bonds as the security for the loan, receiving $10,000 for the stock, less his commissions, with which he can pay for his bonds and have a small profit remaining, subject to the risks of his contract to deliver 100 shares of stock whenever called upon by the lender. Suppose, now, that his calculations are correct and that the stock falls to 90. His convertible bonds may decline, although this need not follow from a situation which would produce a fall in the price of the stock. He might, however, lose three points on his bonds. At the same time he would make $10 a share on his transaction in the stock, since he could purchase 100 shares for $9,000 and return his borrowed stock, receiving back his convertible bonds. If the speculator's calculations prove erroneous and if the stock advances ten points to 110, he would lose $10 a share on his stock, or $1,000. His convertible bonds, however, would probably advance to 105, so that his net loss would be only $350. Furthermore, in the event of the stock being cornered and if a prohibitive rate is charged by stock owners to stock borrowers, the holder of convertible debentures can protect himself and repay his stock loan by exchanging his bonds for stock which the company holds in its treasury available for the conversion from the date the bonds are issued. Owing in part to these speculative advantages possessed by convertible debenture bonds, they are in large demand and their prices are often far above their investment values.

Convertible Debentures as a Deferred Sale of Stock

Debenture bonds offer to a corporation whose stock is selling so close to par that it cannot count on disposing of any large amount at that figure, and which is not in a

position to issue first mortgage bonds, an opportunity to obtain money on favorable terms by combining the investment quality of debentures with the speculative possibilities involved in the conversion privilege. From the company's standpoint, the sale of convertible debentures is merely a deferred sale of the stock for which the convertibles are to be exchanged. This deferred sale of stock is often made through conversion at a high premium, a much higher premium than could be obtained by selling the stock direct. For example, suppose that stock can be sold at 90 and debentures convertible into the stock at 110 can be sold at par. Suppose also, that the price of the stock rises to the conversion price and the bonds are exchanged for the stock. The company has secured, say, $1,000,000, and has issued 9,090 shares for the money by interposing between the receipt of the money and the sale or conversion of the stock, a temporary debt. To obtain this amount under the assumed condition by the sale of stock, in the first instance at 90, would have required an increase of 11,111 shares in the stock of the company. By deferring the sale of stock until a price of 110 is reached, the company has saved its stockholders the co-participation in profits of 2,121 shares of new stock.

Bonds with Subscription Warrants

A recent variation of the convertible bond has been the issue of bonds with subscription warrants attached entitling the owner of the bond to buy stock in the issuing company at prices which are supposed to be attractive. These warrants are either detached from the bond certificates or attached to them. In the first case, they can be sold just as any other security is sold. Whenever the price of the stock goes above the subscription price, these rights have a value which rises and falls as the margin between market price and subscription price changes. When the warrant is attached, the right of subscription at a lower price, which

the warrant represents, carries up the price of the bond, if the stock rises above the point at which it is profitable to convert the bond. In either event, the bond (or preferred stock) is more attractive and more easily sold because of these privileges, the value of the inducement depending on the buyer's opinion of the future of the stock. The use of these warrants is now general in the sale of bonds and preferred stock. In some cases, moreover, large sums have been raised by the sale of warrants to buy stock far above existing market prices. They are also largely used to compensate bankers for guaranteeing the sale of securities of the company which issues the warrants, when there is a good prospect that the stock will rise above the warrant price.

CHAPTER VI

MORTGAGE BONDS

CORPORATION bonds are usually protected by mortgage or collateral security. The relation of each bond to the security is the same as every other. They are all equally secured.

Nature of Security

A mortgage is a written instrument for the conveyance of real or personal property by a debtor to the creditor or his representative to insure the performance by the debtor of his promise to pay interest and principal. But the possession of the property may remain with the debtor, and this is the rule when real property is pledged. When personal property, such as shares of stock, is pledged as security for a loan, the actual property is turned over to the lender's representative or trustee, usually a trust company.

The form of a coupon bond is as follows:

UNITED STATES OF AMERICA

State of New York

No. 100 *$500.00*

THE LONG ISLAND RAILROAD COMPANY

FOUR PER CENT REFUNDING MORTGAGE GOLD BOND

Due March 1, 1949

THE LONG ISLAND RAILROAD COMPANY, a corporation organized and existing under and pursuant to the laws of the State of New York, for value received, hereby promises to pay to the

bearer, or, if this bond be registered, then to the registered owner hereof, at its financial agency in the Borough of Manhattan, in the City and State of New York, 500 dollars in gold coin of the United States of America, of or equal to the present standard of weight and fineness, on the first day of March in the year nineteen hundred and forty-nine, and to pay interest thereon at the rate of four per cent per annum, from the first day of September, nineteen hundred and three, in like gold coin, semi-annually, on the first days of March and September in each year, upon presentation and surrender at its agency aforesaid of the coupons hereto annexed as they severally become due and until said principal sum is paid. Both the principal and interest of this bond are payable without deduction for any tax or taxes which the Railroad Company may be required to pay or retain therefrom under any present or future law of the United States or of the State of New York.

This bond is one of a series of bonds of like date and tenor, of the denomination of five hundred dollars or multiples thereof, known as Four Per Cent Refunding Mortgage Gold Bonds, issued and to be issued to an amount not exceeding in the aggregate the principal sum of forty-five million dollars at any one time outstanding, all of which bonds are issued and to be issued under and equally secured by a mortgage and deed of trust dated September 1, 1903, executed by THE LONG ISLAND RAILROAD COMPANY to THE EQUITABLE TRUST COMPANY OF NEW YORK as Trustee, to which mortgage and deed of trust reference is made for a description of the properties and franchises mortgaged, the nature and extent of the security, the rights of the holders of bonds under the same, and the terms and conditions upon which the bonds are issued and secured.

IN WITNESS WHEREOF, The Long Island Railroad Company has caused its corporate seal to be hereunto affixed and attested by its Secretary or Assistant Secretary, and this bond to be signed in its corporate name by its President or Vice-President, and has also caused the signature of its Treasurer to be engraved upon the annexed coupons, as of the first day of September, in the year one thousand nine hundred and three.

THE LONG ISLAND RAILROAD COMPANY

By .....*President*

Attest:

..... *Secretary*

(Coupon.)

No. 100 *$10.00*

THE LONG ISLAND RAILROAD COMPANY will pay to the bearer at its financial agency in the City of New York, on the first day of March, ten dollars ($10.00) in gold coin, being six months' interest then due on its Four Per Cent Refunding Mortgage Gold Bond Number 100.

.....*Treasurer*

This bond or promissory note refers to a certain mortgage executed to the Equitable Trust Company of New York by the borrowing company, for the equal securing of all the bonds, 90,000 in number, into which this loan is divided. This mortgage describes in detail the property of the company set aside for the securing of its bonds, and transfers it to the trustee, in the following granting clause:

That in order to secure the payment of the principal and interest of all said bonds at any time issued and outstanding . . . and to secure the performance and observance of all the covenants and conditions herein contained, and to declare the terms and conditions upon which said bonds are issued, received and held. . . .

The Long Island Railroad Company, party of the first part, has *granted, bargained, sold, aliened, released, conveyed, assigned, transferred* and set over . . . unto the said Trustee and its successors in the trust hereby created, *all and singular the railroad and ferry property, and other property,* real and personal, used in connection with such railroad and ferry property . . . of the Railroad Company. . . .

(A detailed description of the property follows.)

This grant, however, is not absolute, but conditional. If the borrowing company performs its obligations to pay principal and interest, and, as we shall show hereafter, if it preserves the security of the bonds, then the grant lapses. It is made for a specific purpose: the securing of the bonds. When the bonds have been paid, the purpose has been accomplished and the title to the pledged property reverts to its owner, who is, moreover, so long as he lives

up to his obligations, allowed to remain in undisturbed possession.

Covenants of the Mortgage

In addition to promising to pay the principal and interest, the borrowing company enters into a number of agreements which are designed to maintain the security of the bonds intact. Some of these covenants are as follows: to keep the mortgage a first lien by paying all taxes and assessments; to keep the property in repair; to keep the property insured not merely against fire, but often, as in bridge bonds, against flood and wind damage; to perform all the obligations of the franchises and leases under which it may be operated; and, in many mortgages, to spend a certain percentage of gross earnings upon maintenance and depreciation. Failure to perform any of these covenants would evidently impair the value of the security underlying the bonds.

In case the borrowing company defaults in the payment of principal or interest or fails to perform any of the covenants into which it has entered for the protection of the bondholder, the mortgage provides that the trustee may either enter upon the property and operate it for the benefit of creditors; or sell the property and apply the proceeds of the sale to the payment of the company's debts, returning any balance which may remain to the company; or apply for a receiver to administer and, if deemed wise, sell the property for the benefit of creditors. The company agrees not to interpose any obstacle or objection to the enforcement of the bondholders' rights by the trustee.

Obligation of the Trustee

The trustee is not obliged to ask for the protection of bondholders' rights unless requested by a certain percentage of bondholders, usually not less than a majority, and even then the trustee is not obliged to act unless it is

indemnified against all liability which it might incur as a result of taking such action. On the other hand, the trustee may be removed by a vote of the bondholders. In general, the trustee is not active, confining his functions to receiving and paying out interest and sinking fund, and acting in a routine manner in carrying out the various provisions of the mortgage; for example, in releasing property no longer needed by the corporation from the lien of the mortgage, requiring evidence that the proceeds of sale of such property shall be invested in new property for the benefit of the bondholders, receiving and disbursing insurance payments, expending sinking fund moneys in the purchase of bonds, and similar functions and offices. The trustee acts in accordance with the provisions of the deed of trust, is protected in any action by the written opinion of its counsel, and in general is liable to bondholders for bad faith and dishonesty and for nothing else.

The purpose and effect of this mortgage is to set apart certain property of the company, should it default on any of its obligations, for the protection of its creditors, and to provide a method by which the representatives of the creditors may take possession of this property when default occurs, and apply its income or the proceeds of its sale to the payment of the company's debts. The company, in effect, says to its creditors: "We appoint you or your representative, our trustee, to pay our debts in the event that we are unable to pay them. In order that you may discharge your trust, we place in your hands certain property with the stipulation that as long as we perform our obligations we may be allowed to use the property as our own. Should we fail, however, in the performance of any of these obligations, then you, our trustee, are to sell the property and so discharge the obligation of your trust."

Grades of Mortgages

These mortgages may be of various grades, first, second, and third mortgages, all resting upon the same property, differing from each other in the relative superiority of their liens. Thus the holders of bonds secured by the lien of a second mortgage, if the company defaults on their interest, cannot enforce their claim by seizing and selling its property, until they have first satisfied the claim of the holders of the first mortgage bonds, or, if they sell the property, they must sell it subject to this first mortgage lien. As long as the bonds which the first mortgage secures are in existence, the property of the company cannot be separated from the lien of the first mortgage. In the same way, the lien of the third mortgage is inferior to that of a second mortgage.

CHAPTER VII

THE COLLATERAL TRUST BOND

Conditions Requiring the Issue of Collateral Trust Bonds

When a corporation is organized as a holding company for the stocks or bonds of other companies—the electric light and power industry is now largely controlled in this manner—the only form of secured bond available to purchase the desired securities is the collateral trust bond.

Illustration of Collateral Trust Bond

Under the indenture securing such a bond, certain stocks or bonds are deposited with a trustee, under an instrument which may be illustrated as follows:

That, in order to secure the payment of the principal and interest of all such bonds . . . and the performance of all the covenants and conditions herein contained . . . the Railway Companies . . . have assigned and transferred, and by these presents do assign and transfer unto the Trustee . . . one million and sixty-six thousand and six hundred (1,066,600) shares of the capital stock of the Chicago, Burlington & Quincy Railroad Company, the certificates for which have been delivered to the Trustee, and all additional shares of the capital stock of said Company in exchange for which bonds hereby secured shall be certified and delivered hereunder.

TO HAVE AND TO HOLD the said shares of capital stock, and all additional property that hereafter shall become subject to this indenture unto the Trustee and its successors and assigns, in trust for the equal and proportionate security of all present and future holders of bonds and interest obligations issued, and to be issued under and secured by this indenture, and for the enforcement of the payment of said bonds and interest obligations when payable, and the performance of and compliance with the

covenants and conditions of this indenture, without preference, priority or distinction as to lien or otherwise of any one bond over any other bond by reason of priority in the issue or negotiation thereof.

If any default should occur on the part of the borrowing companies, the trustee was authorized to sell the shares of stock securing the bonds, and to proceed against the Great Northern and the Northern Pacific for the recovery of any balance remaining after the trustee applies the proceeds of the sale to the payment of the bonds. As long, however, as the borrowing companies carry out the conditions and covenants of the mortgage, the trustee empowers the company issuing the stock which he holds in pledge—stock of the Chicago, Burlington & Quincy—to pay to the owners of the stock, the Great Northern and the Northern Pacific, the dividends on the stock, and issues to these owners its power of attorney, or proxy, which will authorize them to vote the stock as though the certificates representing it were in their possession and they appeared as the registered owners of the stock on the books of the Chicago, Burlington & Quincy. In case of any default, however, the trustee immediately resumes these delegated rights of ownership and the two borrowers lose their right to vote the Burlington stock and to receive dividends.

Safeguards of Collateral Trust Bonds

Protection of Bond Collateral

Collateral trust mortgages contain a number of safeguards designed to preserve the value of the pledged collateral. When the security consists of bonds, it may be stipulated that no more bonds of equal rank shall be issued even though the subsidiary company's mortgage authorizes additional issues. To this end, the company owning the stock of the subsidiary company may be required to deposit this stock, or a controlling interest in the stock, with the trustee to make sure that the directors of the subsidiary

company will not exercise their right to increase the amount of the bonds, selling them to outsiders, and so dilute and weaken the value of the collateral or pledge.

Protection of Stock Collateral

Greater care is taken in the framing of collateral trust indentures to protect the value of stock collateral than is necessary in case of bond collateral. The trust indenture securing the Northern Pacific, Great Northern, Chicago, Burlington & Quincy Collateral Trust Bonds, already referred to, contained a number of precautions of this character. The railway companies which acquired, by the issue of these bonds, about 98 per cent of the stock of the Burlington, agreed with the trustee that, in case there should be issued any additional shares of the Burlington stock, except only treasury stock reserved for bond conversion, the railway companies would assign to the trustee 98 per cent of such additional capital stock. They bound themselves not to distribute any part of the surplus of the Burlington existing on July 1, 1901, since such a distribution would weaken the value of the stock. They agreed also that they would cause all necessary repairs, renewals, and replacements to be made out of the earnings of the Burlington lines; that they would not permit the execution by the Burlington of any lease of any of the railways in its system, unless such lease should be made subject to termination by the Burlington, if the shares of the stock held by the trustee should be sold in case of any default; and, finally, that they would not permit the sale of any part of the property of the Burlington, unless 98 per cent of the proceeds of the sale should be deposited with the trustee as security for the bonds.

Substitution of Collateral

Collateral trust bonds differ from call loans with collateral security in that they usually contain no provision

for the substitution of collateral. Mortgages securing bonds by liens on real property allow directors, with the consent of the trustee, to sell any part of the property for which they have no further use, provided only that the proceeds of this sale be reinvested in place of the property withdrawn. For example, an electric railway company may sell a car barn which is subject to the lien of a mortgage securing bonds, or a manufacturing company may move from the city to the country and sell its valuable city site. Corporate mortgages permit such sales provided either that the proceeds are reinvested in new property of equal value, or used to reduce the bonds secured by a mortgage on the property sold. The security of stock or bond collateral for bond issues is, however, by no means so substantial as that furnished by the pledge of real property. Brokers who carry large collateral loans with banks, are required to keep a safe margin in the collateral, 20 or 30 per cent; they are constantly making substitutions in their loan envelopes as the market value of these securities rises and falls. When the bonds run for a long term, the substitution of other collateral for that originally deposited is usually considered to give too much latitude to the borrowing company, and is not often permitted.

It is, however, possible under adequate safeguards to include the privilege of substituting collateral in a collateral trust indenture. An illustration of this method was furnished by the mortgage securing the 4 per cent refunding 25-year gold bonds of the Oregon Short Line Railroad Company. These bonds were secured by the capital stock of the Northern Securities Company, the Southern Pacific Company, and the Oregon Railroad & Navigation Company. Article 6 of the indenture allowed withdrawal of the pledged securities and the substitution of collateral. Withdrawal might be made up to 80 per cent of the value of these securities ascertained by appraisement at the time of their delivery to the trustee. Section 2 authorized the

substitution of the stocks or securities of railroad, steamship, or terminal companies for collateral placed under the mortgage to a value equal to the value of the securities withdrawn. The method of valuation was for two appraisers to be appointed representing the railroad company and the trustee, respectively, and for these appraisers to choose a third whose judgment as to the value of the collateral was final.

Collateral Trust Bonds Issued by Holding Companies

The collateral trust bond is employed for various purposes. A company whose only property consists of the stocks and bonds of other companies, if it desires to issue a secured obligation, is usually limited to the collateral trust bond. The bonds issued by the large industrial corporations organized in the form of holding companies, whose chief assets consist of the stocks of a number of subsidiaries, furnish numerous illustrations of this method. In such indentures, either the stocks of subsidiary companies are pledged under the mortgage, or the subsidiary companies themselves, in return for funds advanced to them by the parent company, execute their own mortgage bonds and turn these over to the parent company to be deposited under its collateral trust indenture. A precaution usually taken is to have all the securities, both stocks and bonds, of the subsidiary companies deposited under the collateral trust indenture, and to provide in the mortgage that the parent company, in return for any advances which it may make to the subsidiary companies out of the proceeds of the collateral trust bonds, shall obtain from the subsidiaries, and shall deliver to the trustee, suitable evidences of their indebtedness to the parent company which evidences of debt shall furnish additional security under the collateral trust mortgage. Should default occur, the holders of the collateral trust bonds, by enforcing through their trustee their lien upon the collateral, come

into the possession of bonds or notes of the subsidiary companies secured by direct liens on their property. For example, a holding company owning a large number of lighting and power properties, may find it necessary to build a new power house for one of its controlled companies, costing $1,000,000. It sells its own collateral trust bonds to obtain the money, taking bonds of the light company whose stock it already owns, and depositing these bonds as collateral security for its own bonds.

Collateral Trust Bonds as a Means of Stock Purchase

The collateral trust bond is also employed by corporations to buy the stock of some other company which, when pledged as security for an issue of collateral trust bonds, furnishes the means for its own purchase without taxing the credit of the purchasing company. Collateral trust bonds are obligations of the issuing company. They are promissory notes which have a value apart from any special security which may be deposited. In order to give them greater currency and value, however, the stock of a company which has been purchased may be deposited as collateral security, in this manner providing the funds for its own purchase. Familiar examples of this use of the collateral trust bond are furnished by the Great Northern, Northern Pacific, Burlington Joint 4s already referred to, since refunded into Joint 6½s; also by the issue of collateral trust 4 per cent bonds by the Atlantic Coast Line, in 1902, to purchase the stock of the Louisville & Nashville.

In each of these cases, the stock security placed under the collateral trust bonds of the purchasing company has produced a revenue at least equal to the interest on the bonds, so that the revenues of the parent companies have not been drawn upon, save temporarily, to pay interest on the collateral trust bonds. The credit of the parent company is, therefore, kept intact for the issue of other bonds for other purposes. With bonds amply secured by stock

collateral, the obligation is not regarded as a burden upon the finances of the parent company. At the same time, however, the surplus earnings of the parent company are available to make up any deficiency in the dividends on the pledged stock. For example, the Great Northern, Northern Pacific, Burlington Joint 6s have an interest charge of $14,950,000. The Burlington pays each year on the stock deposited as collateral security for these bonds $16,586,674 in dividends. The two companies owning the Burlington stock also have a comfortable surplus over their own fixed charges, taking no account of these bonds and the dividend-paying stock which secures them, and they are able to pay the interest on their joint collateral trust bonds, even in the unlikely event that the Burlington should suspend dividends on this pledged stock.

Factors Influencing Value of Collateral Trust Bonds

When collateral trust bonds are issued by companies whose principal assets consist of the securities pledged under the lien of the collateral trust indenture, the investor looks first to the value of the collateral, and the price of the bond fluctuates with the fortunes of the company whose stock furnishes its sole security. An illustration of a bond with no other security than stock was furnished by the collateral trust 4s issued by the Chicago, Rock Island & Pacific Railroad Company of Iowa, pledged under the collateral trust indenture, a company whose sole assets consisted of the stock of the Chicago, Rock Island & Pacific Railway Company of Iowa. During 1909, the price of the bonds showed an extreme fluctuation of 9½ per cent. The bonds were highly speculative, since their interest must come solely from the dividends paid by the Chicago, Rock Island & Pacific Railway Company.[1] During the

[1] The Chicago, Rock Island & Pacific Railway was, in 1915, placed in the hands of receivers and later reorganized, the intercompany relationship above described disappearing in this process.

same year, however, the Burlington Joint 4s, whose interest absorbed a much greater proportion of the dividends on the Burlington stock than that proportion of the Rock Island Railway dividends which was required to pay interest on the collateral trust bonds which its stock secures fluctuated only 4 per cent. The smaller fluctuations of the Burlington Joint 4s as compared with the Rock Island bonds show the high standing of collateral trust bonds issued by strong companies. At the same time, unless the company issuing the collateral trust bonds secured by dividend-paying stock is obliged to make up a deficit between the interest on the bonds and the dividends on the stock securing them, its borrowing power is not seriously affected by the issue of collateral trust bonds since the stock collateral produces the money to pay the interest.

When such advances to pay interest have to be made, as for a time was necessary in the case of the Atlantic Coast Line, Louisville & Nashville collateral 5s, the attention of the investor is directed to the nature of the collateral trust bonds, the direct obligation of the issuing company, apart from the stock security underlying it. The existence of collateral trust bonds, in such an event, subtracts from the borrowing power of the issuing company, since a portion of its surplus earnings must go to pay interest on the collateral bonds.

CHAPTER VIII

TYPES OF MORTGAGES AND BOND RESERVES

AMERICAN financiers were long committed to the idea of specific security sustaining bond issues. Until recent years it has been very difficult to sell debenture bonds (plain bonds without specific security) at values commensurate with their real security. Laws regulating the investment of the funds of savings banks and trust funds usually stipulate first mortgage bonds. In Great Britain, on the other hand, bonds without specific lien security are common and the mortgage bond is seldom met with.

Objects Governing Selection of the Type of Bond

Recognizing the preference of the American investor for mortgage bonds, directors in making a plan for the raising of money must keep in view the following objects: (1) they must obtain for the corporation the money required; (2) they must procure this money at a reasonable cost; (3) they should provide, if possible, for subsequent issues of bonds secured by the same mortgage.

Preference for First Mortgage Bonds

The directors must face the well-known fact that the investor will pay a higher price for first mortgage bonds than for any junior security. Of two bonds of equal security, so far as earnings are concerned, one secured by a first and the other by a second mortgage on the same property, the first mortgage bond will always be preferred. This preference is easily explained. In case of bankruptcy and reorganization, the first mortgage bonds are

in a position of advantage. Up to their full par value based on the earning power of the property set aside to secure them, they must be protected. Before the holders of second mortgage bonds can enforce their lien and sell the property that secures them, they must satisfy all the claims of the first mortgage bondholders, either by paying them or by satisfying them with new bonds of equal or greater security. If they do not do this, the first mortgage bondholders will force the property that secures the obligation to a sheriff's sale and will buy it themselves, using their bonds to pay for it. The investor's first concern is the safety of his principal. He wishes the utmost protection. This protection the first mortgage, as distinct from any junior lien, gives him.[1]

Next to first mortgage bonds, in grading secured issues, the investor will rank collateral trust bonds where the security consists of first mortgage bonds or dividend-paying stocks, and where the borrowing company can pay the interest, if need be, out of its other revenues without using any of the interest or dividends produced by the bonds and stock deposited as security, without depending, that is to say, upon the income produced by the collateral. Finally, he will rank bonds secured by leases, such as car trust certificates. The directors of a corporation proposing to issue bonds will give the bonds, if possible, the security of a first mortgage, or, if this cannot be done, they will adopt some form of bond secured by a first lien either on securities owned, or on rights under leases. In case neither method is available, and also as additional security, the cor-

[1] Many exceptions can be cited to this rule. Some of the best bonds are secured by general mortgages—that is, second and third mortgages. The Erie prior lien bonds, for example, are secured by a sixth mortgage on its main line. In these cases, however, the first mortgages are usually for small amounts calling for such moderate payments in relation to the surplus earnings of the company that the investor disregards the prior liens. A tendency is visible, however, in recent years, among railroad financiers, to retire, as far as possible, these underlying liens in order to bring the mortgages securing the large issues of general mortgage bonds nearer the property.

poration may assume the indirect conditional obligation of a guarantor or indorser of bonds which are sold for its benefit.

Open Mortgage Bonds

In giving bonds first mortgage security it is necessary to deal with two types of mortgages: (1) those which stipulate that all property subsequently acquired by the corporation shall come under the existing mortgages; and (2) those which set aside specific property as security, leaving after-acquired property free to be pledged as security for additional loans. Under the first classification we find two types of mortgages—the open mortgage and the closed mortgage. Under the open mortgage, bonds may be issued to any amount. Here the bonds are protected by the requirement that the money shall be invested in a specified way for the benefit of the company or that their issue shall be subject to certain restrictions. As an illustration, take the bonds of the Narragansett Company, where the mortgage provides that

> Additional bonds may be issued under this indenture in subsequent series, having such rates of interest, maturities and other provisions provided in the indenture as the directors may from time to time approve . . . (*a*) to refund a like principal . . . (*b*) for not in excess of 75 per cent of the cash "cost" or fair value (whichever is less) of additional property acquired subsequent to August 1, 1926 . . . when consolidated net earnings . . . for twelve consecutive months within the fifteen months next preceding shall have been at least equal to twice the annual interest charges on all bonds outstanding under the indenture including those for which application is made.

Closed Mortgage Bonds

Bonds are issued under a closed mortgage when the amount of bonds to be issued under the mortgage is limited. Closed mortgages are of two kinds: (1) where the property subsequently acquired by the corporation is included under

the lien of the mortgage; and (2) where the lien is limited to the property enumerated in the instrument. The first may be called an *inclusive* and the second an *exclusive* closed mortgage.

Inclusive Mortgages

Closed mortgages of the former type have the following form of enumeration of property transferred:

> Together with all the branches, extensions, and sidings thereof and therefrom, and all the lands and rights of way used and occupied, or surveyed, laid out, or intended to be used and occupied for the said railroads, branches, extensions, and sidings, with all the railroad tracks, buildings, and improvements thereon, and all and singular the lands, bridges, trestle works, wharves, shops, stations, depots, engine houses, engines, cars, rolling stock, furniture, equipments, and generally all and singular the estate, real and personal, of the said ———— Railway Company, *whatsoever and wheresoever, now owned or hereafter to be acquired by it.*[2]

Exclusive Mortgages

An illustration of the exclusive closed mortgage where the lien of the mortgage is limited to specified property and does not include any property which may be hereafter acquired, is furnished by the following assignment to the Trustee of the Union Pacific Mortgage:

> All and singular the several lines of railroad, property, and premises belonging to the Railroad Company which are particularly described as follows. . . . Together with all additions, lands, terminals, yards, bridges, tracks, rights of way, trackage rights, buildings, telegraphs, shops, elevators and other structures and fixtures, easements and leaseholds, corporate rights and franchises, now held or acquired or *hereafter held or acquired* for use in connection with the said lines of railroads, *specifically above described.*[3]

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[2] Italics are the author's.
[3] Italics are the author's.

Under this mortgage, the security of the bonds is restricted to the property enumerated in the mortgage. There is no obligation on the part of the company, although it may do so if it desires, in order to increase the salability of its bonds, to add to this security.

First mortgage bonds can be issued under inclusive closed mortgages, only if a portion of the bonds authorized by the mortgage have been reserved to provide for the future needs of the company. Since it is difficult to forecast the capital requirements of a growing company, the open mortgage, with proper restrictions under whose operation the security of all bonds of the issue is increased by the investment of the proceeds of cash produced by the sale of successively issued blocks of bonds, is the type indicated for the future.

Sources of Capital Where all Bonds Authorized under Closed Mortgage are Issued

If the authorization of bonds under a closed first mortgage has been exhausted by issue, the only recourse of the company desiring to give to the investor bonds secured by a prior lien, is to the issue of bonds by a subsidiary company and guaranteed by the parent company; or to a collateral trust issue, if the first mortgage of the parent company does not include all securities owned in its schedule of property "to be hereafter acquired"; in which case, this collateral cannot be subjected to the burden of a first lien, or to a combination of the two methods. These methods of raising capital we shall take up in detail in their proper places.

Advantages of the Exclusive Closed Mortgage

If the closed mortgage does not include "all property to be hereafter acquired," so that the company can subject some of its property to the lien of a first mortgage, then it is usual to execute a general refunding first mortgage, or

a consolidated first mortgage which will become a first mortgage on all the property of the company when the underlying bonds mature and are retired either out of the proceeds of bonds issued under the refunding mortgage, or by exchanging the maturing bonds for such refunding bonds. Provision is made for a sufficient issue of bonds under the consolidated mortgage to retire the prior lien bonds as they mature, either by sale and cash payment or by exchange of the new bonds for the *maturing* bonds, and the general effect and impression is that of a first mortgage bond. Referring for illustration to an issue of bonds by the Union Pacific, we find the following description of the security in a letter from President E. H. Harriman:

Referring to the "first lien and refunding mortgage four per cent bonds" of this company, I beg to state that these bonds are secured by a first mortgage on 1,177.71 miles main track and 146.63 miles other track of owned railroad lines. The lines mortgaged are valuable and important parts of this company's system. . . . The amount of bonds which may be issued at present on the security above stated is $50,000,000, and no further amount can be issued in addition thereto until the security of the mortgage be extended to cover (subject only to the first mortgage of this company, dated July 1, 1897) all the lines covered by said first mortgage . . . the entire railroad mileage of the Union Pacific Railroad Company. When the lien of this mortgage is extended to cover all of the present railroad mileage of the Union Pacific Railroad Company, the total authorized amount of bonds will be $200,000,000, of which $100,000,000 are to be reserved to refund the first mortgage four per cent bonds, due July 1, 1947, for a like face amount, which first mortgage bonds shall not be extended when due, *so that the "first lien and refunding mortgage shall ultimately become the sole first mortgage upon the entire present railroad property of the company, and upon any additional property hereafter acquired or constructed with the proceeds of bonds of this issue."*[4] The remaining $50,000,000 bonds are to be reserved to be issued only for the construction or acquisition of additional lines of railroad, connecting with the lines

[4] Italics are the author's.

then subject to the mortgage, and for the acquisition of other property for use on or in connection with the mortgaged lines and for improvements thereon, as specified in the mortgage, and all of which shall then pass under the lien securing the entire issue of these bonds.

The Union Pacific took advantage of the fact that its first mortgage was not inclusive of all property which it might thereafter acquire, to pledge certain lines which had been built or purchased since the first mortgage was executed, under the lien of this first consolidated mortgage. This was, therefore, a first mortgage on some lines and a second mortgage on others. It is also here provided, which is usual in this type of security, that eventually this first and refunding mortgage should become an absolute first mortgage on all the property of the system.

Here again we find the precaution taken that the company should have available first mortgage bonds, in the provision that $50,000,000 are to be reserved, on which they may raise new money, for subsequent issue. Great care is taken in drawing refunding mortgages to provide that the maturing bonds should be retired, either by payment or conversion as fast as they mature, so that the property on which the refunding mortgage is a first lien shall be extended as rapidly as possible.

Bonds are not often issued under second and third mortgages. So strong is the prejudice against them that they cannot be sold to advantage.

The Land Trust Certificate

A variation of the mortgage bond which is growing in favor especially in the Middle West is the land trust certificate. The following description of this security is taken from an article by George W. York of Cleveland.

Definition

A land trust certificate is an evidence of equitable ownership of an undivided interest in a certain definite parcel of land. The certificate shows on its face what fraction of the whole interest it represents. The actual fee simple title to the land is in the name of a trustee who holds the same in trust for the benefit of the certificate holders. It is not in any sense a mortgage, a bond, or a note, but is an evidence of actual equitable and beneficial ownership of the property designated therein, which has been trusteed as the basis for the issuance of certificates.

Legal Foundations

The legal structure for a land trust certificate issue is comparatively simple. Fee simple title to certain land is conveyed to a trustee (usually a large bank with trust powers) and certificates are issued by the trustee, each representing a certain undivided interest in the entire property. A land trust certificate divides the ownership of real estate in a manner similar to that in which a mortgage bond splits a mortgage. Each certificate resembles, as far as a fractional division is concerned, the stock ownership of a corporation when divided into no-par shares. Each certificate is salable and transferable by indorsement, properly witnessed and attested by an officer authorized to acknowledge deeds in the manner customary in the transfer of real property.

Rights and Obligations of the Parties

The duties and obligations of the trustees and the rights and privileges of the certificate holders are set forth in a document known as the agreement and declaration of trust, which is filed and recorded with the local county officer charged with the recording of deeds. The land is generally improved with an office building or commercial

structure and as the fee title to land carries with it the improvements thereon, it is the additional value represented by such improvements that constitutes the margin of safety and assurance of income to land trust certificate holders.

The land and its improvements are leased for a long period, generally 99 years, to a responsible lessee, on a rental basis that assures the periodic payment to the trustee of sums sufficient to defray all expenses of the trust and leave available for quarterly or semiannual distribution to the certificate holders a fixed return upon their investment.

A land trust certificate has no definite date of maturity. The purchaser of a parcel of land does not expect the return of his money until the property is sold, and so it is, to some extent, with the land trust certificate holder. There are, however, a number of ways of providing for the repurchase of certificates and whatever method or methods are used are embodied in the lease.

Payment of Certificates

One method which is quite commonly used is to lease the property at a schedule of rentals which, in addition to paying a certain return on the outstanding certificates, provides an additional amount which is available to the trustee to use in the repurchase of certificates in the open market or to call by lot. This amount is usually so fixed as to permit the repurchase of all of the certificates before the time of expiration of the lease. As these certificates are purchased they are held by the trustee for the benefit of all other certificate holders, until the entire issue has been repurchased. When all the certificates have been repurchased, the trustee holds all for the benefit of the lessee who may then, as beneficiary, require the transfer of the fee title of the property and the cancellation of the lease.

Another method, which is perhaps the older, is to provide purchase options in the lease whereby the lessee may

acquire the property from the trustee by paying a sum of money sufficient to repurchase all of the certificates at a price which generally affords the certificate holder an attractive premium or bonus on the investment.

Before this form of financing became so popular, many large estates were built up through substantial investments in centrally located business properties, and derived their main income from ground rentals on such property. The large amount of money required for such an operation was prohibitive to the man of moderate means, and it is through the creation of land trust certificate issues that investors may now share in the advantages of investing in small or large amounts in the ownership of this class of improved property.

In a land trust certificate operation, if the lessee defaults in any of the provisions of the lease, there may be a forfeiture of the lease and the trustee can obtain possession of the property and all improvements thereon, for the benefit of the certificate holders. The advantage of this plan may be easily seen. In order that the lessee may continue to use the property on which he has large investments in buildings and improvements, rents must be promptly paid and the requirements of the lease faithfully fulfilled. This investment of money by the lessee provides every incentive to preserve the integrity of this leasehold estate and thus to protect the certificate holder's interest.

CHAPTER IX

CORPORATE INDORSEMENTS AND GUARANTEES

When first mortgage bonds cannot be sold, resort may be had to several methods of securing company obligations. The purpose of each of these methods is to approach as closely as possible to the security of a first mortgage.

Use of the Indorsement

The first of these methods is to organize a subsidiary company in the interest of the company which desires to borrow money. This company issues to the parent company its bonds secured by a first lien on the property purchased or constructed. The parent company either sells the subsidiary company's bonds, placing its indorsement upon them, unless compelled by the terms of its prior lien mortgages to deliver all bonds of subsidiaries to the trustees of these mortgages, or deposits them as collateral security for an issue of its own debentures. A large amount of railway mileage has been built in this manner through subsidiary companies, either because the parent company was limited in its borrowing by the terms of its mortgages, or because the laws of the state where the new lines were located required ownership by a local company. This form of financing new construction is not so common as formerly.

The use of the indorsement is still general. One of the most common uses of this method in recent years is the indorsement of bonds of terminal companies by the various railway corporations which make use of the facilities thus provided. A number of issues of bonds have also been made

by new companies secured by the indorsement of certain prominent and wealthy individuals or firms. The most conspicuous illustration of this use of individual credit to bolster up the credit of a new company was furnished by H. H. Rogers in his guarantee of the bonds of the Virginian Railway, and by Henry M. Flagler, on the strength of whose personal guarantee a large amount of notes was sold by the Florida & East Coast Railway Company. William Randolph Hearst has recently indorsed the bonds of a publishing company which he controls.

A feature of these personal guarantees which may cause trouble is the liability of the estate of the guarantor in the event of his death. A man's estate is liable for all his debts and distribution will be deferred until all debts "presently due" on which he is liable as guarantor have matured. With a bond maturing twenty years from the time of the guarantor's death, however, the probate court will not delay distribution for this long period. Such a guarantee is of value only during the life of the guarantor. It might be provided, however, that the guarantor's life could be insured for the amount of the bonds guaranteed, the insurance premiums to be paid by the company and the face of the policy paid to the trustee of the bonds, or the guarantor could deposit collateral to secure his obligation, the collateral being released as the obligation was reduced.

Here again appears the advantage of a strong guarantee. If the guarantor assumes the debt, his estate could not be distributed without making provision to protect his obligation.

Another use of the guarantee is the sale of equipment notes given to such companies as the American Locomotive Company or the American Car & Foundry Company by weak railway companies, and which are sold with the indorsement of the equipment companies.

Weak Guarantees

Guarantee of a corporate bond has the significance of an indorsement on a promissory note. By indorsing a note, a person or corporation alike agrees that in case the maker does not pay the note at maturity the indorser will pay it. Corporate guarantees are of two kinds: strong guarantees and weak guarantees. An example of a weak guarantee is as follows:

For value received the Great Western Power Company hereby guarantees to the holder of the within bond the prompt and punctual payment, according to the terms thereof, of the principal of, and interest upon, the within bond, and further guarantees to the said holder that the sinking fund installments in respect to Series "A" bonds provided in the mortgage and deed of trust and in said bond referred to *shall be made in*[1] the manner and to the extent therein provided.

This guarantee is weak in the sense that it stipulates that the holders of the bonds of the California Electric Generating Company to which the guarantee referred, will receive their interest and principal and will be protected in accordance with the terms of the mortgage. The Great Western Power Company does not itself formally assume the obligation, but merely agrees to assume it in case the California Electric Generating Company, which issues the bonds, fails to carry out its agreement.

Strong Guarantees

An example of a strong guarantee is as follows:

For value received the St. Louis Southwestern Railway Company hereby unconditionally guarantees to the owner of the within bond the payment of the principal thereof and the interest thereon as the same matures and falls due, and hereby agrees itself to pay the said principal and interest if default in the payment thereof be made by the Terminal Company.

[1] Italics are the author's.

Here is an unconditional assumption of debt by the guarantor, and this form is preferred to that first given. An even stronger form is the following guarantee indorsed upon bonds of the New York & Westchester Lighting Company, a subsidiary of the Consolidated Gas Company of New York:

For value received, the Consolidated Gas Company of New York hereby assumes and agrees to pay the principal and interest of the within bond as the same shall respectively become payable.

Here is the strongest form of guarantee, the assumption by the guarantor of the obligation of paying interest and principal, assuming the risk of reimbursement from the treasury of the subsidiary company.[2]

Another form of guarantee provides that the guarantor shall deposit within a certain time before each interest date, with the trustee of the bonds, the amount required for the payment of that installment of interest. As a rule, that form of guarantee is preferred in which the guarantor assumes an unconditional obligation. Another common form of guaranteed security is stock on which a certain rate of dividend has been guaranteed by another company. This method is mainly employed in connection with leases, the guaranteed dividend representing the rental payment. Guaranteed stock, when the guarantor is a strong corporation, is very highly regarded by investors.

Joint Guarantees

Joint guarantees are similar in effect to joint indorsements. Each guarantor takes a definite amount of responsibility for the payment of the bonds. This form of guarantee is frequently used in connection with joint use of railway terminals.

[2] These bonds are sometimes styled *assumed bonds*. They are direct and unconditional obligations of the guarantor.

Indirect Guarantees

Again, when some contract of the prospective guarantor prohibits the ordinary indorsement, this provision is evaded by a traffic contract or a purchase contract which will provide sufficient revenue to meet the obligation, the payment of which it is desired to secure, for instance, the payment of interest on a bond issue. For example, an oil refining company, prohibited by the terms of its mortgage from guaranteeing the bonds of an oil or gas producing company whose stock it owns, may accomplish the same result by entering into a contract with its stock-controlled company to buy from it a sufficient amount of oil or gas at a price sufficient to provide for the payment of interest on the bonds. In such a case, while the company may be prohibited from guaranteeing obligations of other companies, it is not prohibited from making traffic or purchase agreements with such companies, and the obligations of the agreement are the same as the obligation of the guarantor. This contract can then, if desired, be assigned to the trustee of the bond. So secured, he can proceed under the contract exactly as he would sue under a contract of indorsement.

In case of strong companies, which have guaranteed bonds secured by mortgages on portions of their system, covering property which is essential to their business, guarantees are regarded of great value. Such bonds are often sold on no other security than the indorsement, no attention being paid to the earnings of the company actually issuing the bonds.

Remedies against Guarantor

The remedy of the holders of guaranteed bonds or stock is the same as the remedy of the holder of an indorsed note, namely, a suit against the indorser for the amount remaining unpaid. The objections to this form of security are, therefore, the ordinary objections to indorsement se-

curity: the necessity, in some cases, of suing the indorser when there is a doubt in the indorser's mind as to his obligation under his guarantee and the fact that where this method of expanding a company is adopted, there may be no limit to the amount of indorsement liability which may be assumed.

Dilution of Guarantee

The second objection to the guarantee, as compared with security of a mortgage, is more serious. When bonds are issued secured by a mortgage, certain property is conveyed to the trustee. The purchaser of the bonds knows that when the issue authorized by that mortgage has been exhausted, no further bonds can be issued on that property, unless these are issued subject to the lien of the first mortgage. He also knows the exact conditions under which bonds may be issued out of a bond reserve. The creditor knows exactly what his security is. On the other hand, a company with surplus earnings of $1,000,000 over interest charges may place its indorsement on a series of bonds issued by other companies whose stock it has acquired and whose dividends are taken into its own treasury. These guarantees, if the borrowing subsidiary companies do not prosper, may shrink in value, as the margin between the amount which the guarantor has agreed to pay under its indorsement and its income from the stocks of its subsidiaries, is reduced. The company with a surplus of $1,000,000 over its own fixed charges may assume the contingent liability of a guarantor up to $300,000 a year, and the bonds so guaranteed will be good entirely aside from the earning power of the companies which secure these bonds. When, however, these guarantees aggregate $600,000 or $700,000 a year, the investor must look more closely into the condition of the borrowing companies, and must place less reliance upon the security offered by the indorsement. In general the rule may be considered as

established that an ample margin between the surplus earnings of the guarantor company over its own fixed charges, and its contingent or direct liability for the debts of others, must be established if the value of the guaranteed bonds is to be maintained.

This rule governing the security of a guarantee can be enforced by including in the indorsement an agreement of the guarantor to limit his contingent liability. If, for example, his surplus earnings are $500,000 a year and he assumes a contingent liability to pay $250,000 a year, it may be provided in the indorsement that no additional guarantees will be made until the combined net earnings of the guarantor and the company whose bonds are guaranteed have reached $1,000,000 a year. By preserving a safe margin between the payments which may be required by the contingent liability and the earnings out of which these payments must be made, the security of a guarantee may approach the security of a debenture.

Guaranteed Stock

Guaranteed stock ranks with guaranteed bonds and is valued in the same manner. When the guarantor is strong, the stock will be valued for this reason. If the earnings of the company issuing the stock are adequate to protect the dividend rate guaranteed, the position is so much stronger. Guaranteed stocks sell at high prices, reflecting the most favorable opinion of the investor.

CHAPTER X

THE SHORT TERM NOTE

THE service which the bank of deposit and discount renders to business consists in anticipating the proceeds of bills and accounts receivable or in the advancing of money against anticipated receipts which will furnish the means of repayment. Beyond this, the commercial bank which lends its demand credit, cannot safely go. Bank loans are not available as a source of permanent capital.

In some cases, however, a special form of obligation, usually secured, is selected either by design or by necessity and is sold largely to financial institutions. This is known as the short term note. In form, the note is a bond running for one, two, or three years, and paying a higher rate of interest than long term bonds of the same degree of security. These notes may be used in the early stages of a company's operations to provide funds for construction, or they may be used by a going concern to secure money for expansion or payment of obligations.

This form of obligation is resorted to during periods of stringency in the money market, when long term bonds cannot be sold except at low prices; in other words, where the price of long term money is high.

Conditions Favoring Short Term Notes

A railroad corporation expects, under normal conditions of demand, to sell its first mortgage 5 per cent bonds at par. The bond market may, however, get into such a condition that a 5 per cent bond of this class cannot be sold above 90, at which price it may cost the issuing company

6 per cent. Suppose the corporation wishes to issue a 20-year bond. If it makes the issue now, and if the bonds are irredeemable, it must pay the 1 per cent extra for 20 years, or 20 per cent on the amount of the issue. If the bonds are callable this situation may not arise but they must be called at a premium even if they have been sold at a discount. Assuming that an improvement in the bond market will, within two or three years, permit the sale of 5 per cent bonds at par, it is advantageous for a company, in the circumstances described, to borrow the amount required for two or three years, paying 7 per cent, and trusting to its ability to refund the obligation on a 5 per cent basis. Instead of paying 20 per cent excess interest, the company which makes an issue of three-year 7 per cent notes, and refunds these at 5 per cent, will pay a 6 per cent premium.

The conditions under which the issue of short term notes is advantageous are illustrated by the situation of the American money market in 1906. During this year, the bond market had been extremely dull. Prices generally declined; issues yielding less than 4½ per cent gained little attention. The explanation was found in the high rates for money. The largest bond buyers are the financial institutions—banks, savings banks, trust companies, and insurance companies. During 1906, these large bond buyers were able to lend their funds on call through the banks or to purchase commercial paper at very high rates of interest and with perfect security. As a result, they reduced their bond purchases. As an illustration of the stringency of money prevailing during this year, one of the largest manufacturing concerns in Philadelphia was obliged to sell its commercial paper on an 8 per cent basis. Individual bond buyers, large merchants, and manufacturers, who are, to an increasing extent, investing a portion of their profits in negotiable securities, had their funds so fully employed in their business that no surplus remained for investment. Railroad and industrial corpora-

tions were at this time heavily committed to new undertakings. To obtain the money for these extensions and improvements, rather than burden themselves with high rates of interest during the life of long term bonds, or the payment of a premium for refunding, they preferred to sell short term notes, generally paying 6 per cent interest, which were taken by banks and private investors on account of the security offered, and the high rates of interest approaching those which could be obtained in the loan market. The amount of notes put out by the principal railroads and industrial corporations during this year was very large. The corporations making these short term note issues preferred to pay higher rates for one, two, or three years in the belief that when the date of maturity arrived, the condition of the bond market would have so much improved as to permit the retirement of these short term obligations with bonds at lower rates of interest.

The investment banker who acts as fiscal agent for the corporation, looks with great favor upon this method. He makes a profit on the original note issue, and a second profit on the bonds issued to take up the notes. If the notes are extended at maturity, instead of being paid, the banker may come in for three profits, since he will purchase the notes not extended and charge for his services.

Illustrations of Short Notes

An illustration of the use of short term obligations was the $15,000,000 of 6 per cent gold notes issued by the Southern Railway on May 1, 1908. The bond market at this time was so greatly depressed that none but issues of the strongest corporations would be taken. The Southern Railway was not in this class. Its credit was considered so doubtful that it was not expedient to attempt to market its bonds. These notes were offered at 98½ and accrued interest and were payable on or before May 1, 1911.

Short term notes may be either secured or unsecured. If

unsecured, their value rests upon the general credit of the company, primarily upon its surplus earnings over charges. The security of notes is also increased by the fact that, in most cases, their proceeds are invested in the improvement of the property. For example, in the case of the Southern Railway notes, it was proposed to apply the proceeds of the notes substantially as follows:

> First, to provide capital for obligations accrued and to accrue, representing generally the retirement of equipment obligations, the purchase of steel rails, construction now under contract, and additional betterments and improvements to the properties covered by the development and general mortgage, say $8,500,000; to provide for the redemption of the sterling notes which will mature on June 1st and July 2nd next, say $3,000,000; the balance to be used to reimburse the treasury to that extent for moneys heretofore expended for construction and capital account, say $3,500,000.

Out of $15,000,000 of notes, the proceeds of $8,500,000 would go to improvements supposed to produce revenue equal to the interest on the notes, and which increased, to that extent, the value of the property which secured them. Only $3,000,000 was provided to fund other notes.

Security of Short Term Notes

Short term notes are usually secured. In cases where they have been issued on account of the present unsalability at attractive prices of mortgage bonds already authorized, it is customary to pledge collateral as additional security for the notes. The $15,000,000 of Southern Railway notes, for example, was secured by $20,000,000 of Southern Railway development and general mortgage 4 per cent bonds, Series A; by $2,500,000 of Tennessee Central Railroad prior lien mortgage 4 per cent bonds, and by $2,000,000 Virginia & Southwestern Railway first consolidated mortgage 5 per cent bonds. Earlier in the same year, the Hudson Company of New York City sold $15,000,000 of 6 per cent

notes, secured by the deposit of $22,500,000 of the first mortgage 4½ per cent bonds of the Hudson & Manhattan Railroad Company which owns the tunnels between New York, Jersey City, and Hoboken. Indeed, the securing of these short term obligations by collateral is so common that the giving of such security may be considered obligatory. Even a strong company like the Pennsylvania Railroad Company secures its short term obligations by ample collateral.

Since these notes are sold on a banking basis and are secured by collateral, it is fair to the company that they should have the same opportunity of reducing their loans which is allowed to the ordinary borrower on collateral. This provision is usually made. The Hudson Company's notes, for example, were issued subject to the right of redemption on any interest date, upon thirty days' notice, at par and interest plus a premium of one per cent per annum upon the principal from date of redemption to maturity.

If at any time during the life of the short term obligation, a favorable opportunity arises to sell the collateral, it is usual to provide that this can be done, the proceeds being applied on the notes. Thus, in the issue above described, it is provided that:

> The Southern Railway is to have the right at any time to withdraw by payment therefor in cash at the following prices: Development and general mortgage four per cent bonds, Series "A," at the same price and for the same periods as provided above for the conversion of the notes; Tennessee Central prior lien mortgage four per cent bonds at not less than 85 per cent; Virginia & Southwestern first consolidated mortgage five per cent bonds at not less than ninety per cent, with accrued interest in each case. Such cash is to be applied by the trustees to the purchase or redemption of the notes as provided in the trust indenture.

Danger in Short Term Note Issue

The use of short term notes is a temporary expedient to bridge over a period when bonds are low in price. Although they may be sometimes funded into other notes, this process cannot be continued indefinitely, and refunding usually requires higher interest or better security on the new notes. These notes must be paid, principal and interest, within a short time. On this account, reliance upon this means of obtaining new permanent capital is, for a weak corporation, considered unsafe. Although it is expected that the bond market may improve to a point where the collateral back of the notes can be sold at good prices, yet this improvement cannot be guaranteed. It has frequently happened that short term obligations came due at a time when it was impossible for the company to pay them.

With a strong corporation, in such an event, no difficulty is to be expected. The Pennsylvania Railroad can always meet its note issues. There are few companies of this class. If the maturity of the notes coincides with a period of business depression, when the net earnings of the issuing company are below their normal level and when the bond buyer is usually critical concerning the securities offered him, the company which, for the sake of saving interest, has burdened itself with the obligation to repay a large sum at such an inopportune time, may run great danger of bankruptcy. The difficulties experienced by the Wheeling & Lake Erie and the Erie Railroad Companies in refunding their notes maturing in 1908, illustrates the danger in this method of procuring funds. The last receivership of the Missouri, Kansas & Texas, and the difficulties of the New York, New Haven & Hartford and Boston & Maine with their note issues, illustrates the danger of gambling with the future of the money market. The first company was forced into bankruptcy by the maturity of a note

issue, and the Erie was saved only by the intervention of E. H. Harriman, who personally advanced $5,000,000 to meet a maturing note issue when the company's own bankers would not take the risk. Mr. Harriman made this loan because of his fear that a receivership for the Erie would inflict serious damage on the other companies in which he was interested, and on the general financial situation. For any but the strongest companies, the provision of new capital by the issue of short term notes is to be entered upon with great caution.

CHAPTER XI

TERMS AND CONDITIONS OF BOND ISSUES

In taking up the considerations which influence the banker and promoter in preparing a financial plan, we note that their first concern is to obtain the necessary money on the easiest terms. Up to the point of providing the money, their interests are united. It is only when the division of the profits is reached that they part company. We have, therefore, to consider the choice of securities of which the capitalization of the new company is to consist. These are, as we have seen, stock of various kinds and bonds with various kinds of security.

Use of Fixed-Return Obligations in Financial Plan

As a rule, whenever the enterprise admits, the financial plan will call for the issue of bonds and if that fails, for the issue of preferred stock. The reason for preferring this method of financing lies in the nature of bonds and preferred stock. The purchaser of a corporation bond, in return for security of income and principal, makes no demand to share in the profits of the company above the rate of interest named in his bond—6, 7, or 8 per cent.

With the preferred stockholder the situation is the same. In return for a preferred claim to a definite rate of dividend, the preferred stockholder, unless his stock is participating with the common stock in distributed profits above his stated dividend, stops with his stated dividend. All additional distributed profits go to the holders of common stock. If, therefore, in the financial plan, all, or a large part of the necessary money can be secured by selling

bonds or preferred stock, and if the expectations of the promoters that large profits will be earned are realized, it is profitable, from the promoter's standpoint, to employ this method.

Suppose that $1,000,000 is required to carry through the consolidation, or build the plant, or construct the railroad. The earnings of the enterprises are estimated at the annual rate of 12 per cent on the capital, or $120,000. This money can be raised either by the sale of bonds or by the sale of stock, or both methods can be used in combination. If the $1,000,000 can be provided by the sale of bonds bearing 8 per cent interest, the promoters and bankers will have common stock which can share surplus earnings of $40,000 a year. For this stock, they may have paid only the cost of securing the options and selling the securities. Although they may surrender part of this common stock to be given as a bonus with the bonds, they can usually retain a sufficient amount to control the company. If, on the other hand, they sell common stock to obtain this $1,000,000, they must admit each share of stock to full participation in profits. Assuming that 10,000 shares of common stock are issued and that the promoters and bankers, in return for options, franchises, contracts, and services, by methods which will be explained in a later chapter, obtain 5,000 shares; and assuming further that $80,000 is distributed, each share will receive $8. Up to this point, the fact that all stock is common stock makes no difference to the banker's and promoter's stock interest. Suppose, however, that earnings increase to the point where $16 per share can be paid, or $160,000. With only one class of stock issued, each share will receive its proportionate part of this dividend. With a division of the stock between 8 per cent preferred and common, however, the preferred stock will receive $40,000 and the common $120,000. By including fixed interest or fixed dividend elements in the capitalization, all increases in earnings go to the common

stock. Furthermore, when the security is good, bonds or preferred stock can be more readily sold and at higher prices than common stock. From the standpoint of the banker and promoter, whenever the nature of the business permits, bonds or preferred stock are selected as a means of obtaining money.[1]

Non-Specialized Property the Best Security for Bonds

We classify industries into those which furnish satisfactory security for the issue of bonds and those which do not. In the discussion of the mortgage as security, we have seen that great attention is paid to the enumeration of the items of property of a corporation and that this property is carefully segregated to protect the holders of the bonds. When this property is non-specialized—that is, when it can be put to a variety of uses, so that it can readily find a purchaser, for example, a loft building or an office building, or stocks of finished goods, or materials—then the property furnishes the security for the loan, with earnings in a secondary position. When, however, the property of the company is specialized to the use of a particular business, such as a railroad or manufacturing plant, where the business must be carried on in a certain place and by people who are skilled in its management, and where the property, once devoted to a particular use, can be turned to no other use, the real security of the creditor is not the general sales value of the property, but the value of the property based upon the amount which can be earned by its employment in a specialized field. With a mortgage on centrally located real estate, properly valued at the time the mortgage was placed, the selling value of

[1] Although we must anticipate an explanation made in detail in a later chapter, it is necessary to remark that the State and Federal Commissions for the regulation of railroads, and the Securities Commissions have sharply curtailed this practice of collecting from bondholders the cost of the property, while allowing the stockholders to take all the profits over interest.

the real estate can usually be realized. Even here, however, much attention is paid by the investor to the rentals received or to be received.

Here it must be noted, however, that in large mortgages on office buildings care is usually taken, before the bonds are offered to the public, to lease for long terms a sufficient amount of floor space to provide for fixed charges. For example, an office building, such as the General Motors building in New York, may be valued at $7,500,000. This building houses thousands of tenants, each one contributing to its earnings. These tenants represent a variety of occupations—professional men, lawyers, accountants, engineers, financial houses, representatives of out-of-town concerns, large manufacturing corporations, etc., their names being a cross section of the business life of the country. Every month, the tenants are changing as the leases expire. Vacancies occur, new tenants enter, while underlying the rental structure are entire floors leased for long terms to large corporations. This is a good example of a generalized demand for office accommodation, a value resting upon the broadest possible basis of diversity of business enterprise. Any group, for example, silk manufacturers' representatives, could move into a building of their own, and the places would be quickly filled by some other group. Such a building could be mortgaged safely for $5,000,000.

As an extreme instance of specialized value, I have in mind an immense factory built in a southern state by an engineering firm of high repute to exploit an industrial process which promised to revolutionize an industry. Not only was the plant built at great expense, but a factory town, complete with all municipal services—water supply, sewage, and lighting—was erected to house the workers. The process did not succeed and the entire investment, an amount running into millions, was lost. This is an example of value depending entirely on earnings, and earnings depending on the success of one specialized process. The

security of the creditors is the earning power of the business which is carried on in the factory, and when earnings die, value dies also.

Earning Power the Real Security of Bonds

Furthermore, a business is not an aggregate of physical property, but consists of physical property—buildings, boilers, machine tools—plus a sufficient amount of working capital, plus bank and trade credit sufficient for the needs of the business, plus an industrial opportunity, plus the organization and ability to operate the business.[1] The corporation owning this business borrows the money, and the value of the business is based upon its earnings. The physical property, which is set aside with such a profusion of formality in the mortgage, is merely the visible symbol of its earning capacity. Without the plant, it is true, earnings would be impossible, but the plant has little value unless the spirit of profitable life is breathed into it by an efficient organization. In estimating the ability of different classes of enterprises to furnish security for bond issues, we must first take account of earnings.

Since the bondholder is solely interested in the security of his principal and regular payment of his interest, and since both security and interest depend upon income, the companies with the most stable earnings furnish the best security for bonds. Stability of earnings depends upon: (1) the possession of a monopoly; (2) good management; and (3) the character of the business.

Definition of Monopoly

Monopoly is exclusive or dominant control over a market. The more complete this control, the more valuable

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[1] When Dr. Samuel Johnson was valuing the Thrale Brewery in London, he exclaimed, "Sir, we have not here to do with a mere commodity of pots and vats but with the potentiality of becoming rich beyond the dreams of avarice."

is the monopoly. The advantage of monopoly lies in the fact that the prices of services or commodities are controlled by the seller rather than by the buyer, so that the principle of charging what the traffic will bear can be applied in fixing prices. By this is meant that the seller, controlling the market, charges those prices which will yield the largest return in profits. When the demand is strong, prices can be advanced. When the demand falls off, they can be reduced to stimulate buying. Moreover, monopolies can guarantee prices for long periods, the stable price of steel rails being a familiar example, so that the buyer has no encouragement to hold off for better terms, and so that the "higgling of the market," so costly to the seller anxious for business, is eliminated. In the long run, the returns in profits from monopoly are greater than when the consumer is able to play off one seller against another and so secure concessions in prices.

Classification of Monopolies

Monopolies are of various origins. The five most familiar are: (1) franchises, the right to use public property for private purposes, for example, the furnishing of light, power, water communication, and transportation; (2) control of sources of raw material supply such, for example, as that which the Aluminum Company of America exercises over the American deposits of bauxite ore; or the water power and timber reserves of the International Paper Company; (3) patents, which give the exclusive right to manufacture an article, the most familiar recent illustration being the centralization of radio patents in the Radio Corporation of America; (4) trade marks, in which appear the value of habits of thought built up in the minds of millions of customers by the spending of immense sums to identify "Royal" with baking powder, "Ivory" with soap, "Fels Naptha" with cleaning powder, and "Victor" with phonographs. The importance of advertising is rapidly increas-

ing, and the rising scale of advertising expense gives an extraordinary advantage to the large concerns which can meet the requirements of nation-wide propaganda. For example, the Lambert Company, manufacturers of Listerine, in a bankers' circular in 1926, vouches for the statement that, starting in 1921 with practically no advertising, each month's increase in advertising has been met during that month by an increase in profit as great as the advertising increase and a substantial additional profit. This company in four years spent over $4,400,000 in advertising. (5) The high cost of duplicating plant is a form of monopoly. This secures the railroads in thickly settled territory, where land values are high, and where terminal sites are especially costly, against competition from the duplication of their facilities. Of these forms of monopoly, *those conferred by franchises and by large advertising outlays are most valuable from the standpoint of bond security.* Next comes possession of supplies of raw material, next advertising monopoly, and last, patent monopoly.

Importance of Management to Earnings

Stability of earnings also depends upon good management. This means not merely economical operation, but cultivation of new business. The success of the Ford Motor Company is mainly due to the genius of Henry Ford. He has, from the beginning, dominated its policies, production, finance, and sales. Without his direction, as a number of bankers testified in a tax hearing at Washington, they would place a much lower value upon its property. The success of the United States Steel Corporation was mainly due to Mr. E. H. Gary. He carried the company through the dangers of the Government suit for dissolution. He maintained a dominating position in the trade without antagonizing competitors, and he stabilized competition so that steel prices have been well maintained without agreement or consent, but merely by the force of

example. In same cases, *e.g.*, Montgomery-Ward & Co., a change in management has been immediately followed by a substantial improvement in earnings. The scope of modern business is so tremendous that wrong decisions are enormously costly. The high salaries paid the large executives represent a small fraction of the value of these men to their companies. A striking illustration of the cost of mistakes is shown by the difficulties of the Servel Company, recently reorganized. This company manufactures gas refrigerating units. Originally these were contained in wooden boxes, protected against warping by paint. The summer of 1926 in the eastern territory was excessively damp. The paint cracked, boxes warped, and it was necessary for the company to replace 6,000 units with others, housed in metal boxes. Some official was responsible for this mistake which wrecked the corporation.

Importance of Stable Demand

Stability of earnings depends finally upon the breadth of the demand. In manufacturing industries, for example, those enterprises which produce the necessities of life have a more stable demand than those which produce trademarked articles which are not favored by large advertising. Industries depending upon the sale of securities, such as machinery and materials, are seriously affected by depression in the securities market. Industries which rely largely upon export demand are much influenced by foreign competition. Articles sold mainly on the installment plan have difficulty in maintaining their sales in territories where strikes or depression seriously reduce employment. One of the most prized advantages of consolidation is the broadening of demand by taking in the producers of allied lines. The recent consolidation of cable and wire manufacturers is a case in point. Another illustration is the wide diversity of the DuPont products, and the broad basis of demand upon which the business of the

General Motors Corporation is founded, with "a car for every purse."

Classification of Industries as Foundations of Bond Issue

The growth of inter-industry investment is proceeding at a rapid pace. For example, the DuPont interests in 1916 purchased a large interest in General Motors. General Motors has made a heavy investment in electric refrigeration and in the Fisher Body Corporation, which manufactures automobile bodies not only for the various units of General Motors, but for other automobile companies. More recently, men identified with the Fisher Body Company have bought heavily into the Baldwin Locomotive Works. The DuPonts are closely associated with J. P. Morgan & Company, a firm which, with their affiliations, exercises great influence in the railway field. J. P. Morgan & Company in 1926 bought a controlling interest in the Johns-Manville Company, the leading manufacturers of insulating materials. The benefits of these affiliations to every company involved are evident. Motor trucks and buses are purchased in enormous numbers by railroads. The demand for electric locomotives is promising. The railroad market for explosives is very large, and the United States Steel Corporation sells large tonnages to the DuPont controlled companies. The control of the Johns-Manville Company is in position to influence a large amount of railroad and industrial demand. These extensive stock purchases are ostensibly for income. The advantages of market control are also evident and, it is reasonable to suppose, have great weight in influencing these investments and the stability of earnings of those companies which figure in these alliances is increased.

We may classify enterprises according to the quality of the security which they offer for an issue of bonds. Mining enterprises—coal, iron, copper, lead—furnish a basis for

bond issues only when the extent of the resource is known. When a bed of coal or a deposit of ore has been surveyed and its contents estimated, it furnishes a basis for a bond issue up to a moderate percentage of its selling value. This value, like the value of real estate, is not based on a free market. There is no exchange on which coal lands, for example, can be readily sold. At the same time, for proven mineral properties, there is a market value based on the amount which can be realized from the operation. Industrial enterprises, until recent years, were mortgaged, as a rule, only when possessed of mineral properties or salable real estate. The limit of bond issues is narrow and bears a close relation to the selling value of the property.

Public service corporations, operating under franchises liberal in terms, furnish excellent security for bond issues. The monopoly of water, electric light and power, or gas companies, which have the exclusive right to serve the consumer for a term of years at prices which leave a large margin over cost, is so perfect that the bondholder runs little risk of lending to a high percentage of the cost of the property. In this field of municipal public service companies, the larger the city the sounder is the investment. In a large city, the overhead or interest cost is spread over the maximum number of units, and the plant is utilized to its full capacity. On the other hand, the cost of extending certain kinds of municipal services—for example, transportation in the form of subways—may be so great, that the returns for many years may be uncertain.

Railroads, until the last three years, furnished the best basis of bond issue. The high reputation of railroad securities has been due: (1) to the stability of the demand for the transportation service which is rendered to every industry; (2) to the high cost of duplicating railroad plants which secures existing lines in the possession of valuable territories, and, within the limits imposed by law, enables them to fix uniform rates on freight and passenger

traffic; and (3) to the implied guarantee of 5¾ per cent on the value of the property by the Transportation Act of 1920, together with the rigid and salutary control of their activities by the Interstate Commerce Commission, a control which, among other advantages, protects the railroads from competitive construction.

The monopoly position of the steam railroads has been weakened by the invasion of other agencies of transportation. The bus, the private automobile, and, recently, the airplane have greatly reduced passenger traffic. Boats, trucks, and pipe lines have cut into freight traffic. Central electric power plants have reduced the amount of coal transported. The grain export trade has almost vanished. Industries are moving nearer to the consumer. Interior cities and towns are developing to a more self-contained position. These influences have destroyed railway monopoly. Railway bonds represent a capitalization of monopoly profits. With those profits reduced, the security of railway bonds declines. There is little hope that American railroads, no matter what rates they are permitted to charge, will show 5¾ per cent on their present value. This situation is largely independent of the depression, although that, of course, is primarily responsible for the serious decline in railway earnings since 1930. These competitive forces operated before the depression, were strengthened by the depression, and will operate after the depression is ended. Certain classes of traffic—coal, ore, lumber, sand, cement, and grain—will go by rail only when they do not go by water. Passenger traffic may be increased by increasing speed and providing more comfortable cars. Truck competition may be partially met by a combination of truck and freight car delivery, giving door-to-door service. Even with all these corrective factors operating, however, it is doubtful whether railway earnings will ever increase so far as to restore railway bonds to their former premier investment standing.

Comparison between Public Utilities and Manufacturing Companies as Foundations for Bond Issue

In recent years, a great number of industrial bonds have been issued. There is no limit to the variety of such issues. All kinds of manufacturing and merchandising industry, as well as forms of extractive industry, such as oil, gas, or fishery companies, which were formerly considered too risky to furnish a basis of bond issue, have been freely capitalized with bonds. In the circulars accompanying these issues, emphasis is laid on records of dividend payment, as well as on earnings and liquid assets, and an effort is often made to give the bonds security by requiring a margin of current assets over the bonds outstanding. Drastic sinking-fund provisions are also included. In the mortgages securing these bonds, stated amounts of net current assets must be maintained on penalty of being declared in default.

Industrial corporations which have issued bonds, have yet to pass through the ordeal of a long period of depression. In former days, industrial bonds were frowned upon by bankers. Compared with the stability and security offered by well-selected railway issues they were little regarded. The reasons for this sentiment, sometimes called prejudice, in favor of railroads as compared with industrials, were summarized by the writer in 1903 as follows:

1. The demand for any manufactured product is less stable than the demand for public utility service in the same territory.
2. Manufacturing companies are more exposed to competition.
3. The location of manufacturing industry is subject to more frequent changes.
4. The personal equation enters more largely in the management of a manufacturing company than into utility management.

5. Manufacturing industry is more complex, less visible, and therefore less easily understood by the investor than the business of supplying water, gas, or electricity.

These points of inferiority still characterize industrial bonds as compared with utility bonds. It is true that demand is much broader than twenty years ago, that competition is more civilized and less ruthless than when John H. Patterson and Andrew Carnegie were attacking their rivals, and that, in the standard industries, personnel and methods are now to a high degree standardized. Especially does the growing substitution of machinery for labor contribute to the stability of investment. The great aggregations of capital which control the leading industries also give great assurance of stability. But with all these healing qualifications, the industrial bond has yet to justify itself. While its position has undoubtedly improved, the test of a prolonged period of depression will be needed to show if the basis of bond capitalization in this field has been sufficiently conservative.

Determining the Amount of Bond Issue

We now take up the amount of bonds which can be issued. The amount should not be so great as to impose upon the corporation a burden of interest charges which is above, or even equal to, a conservative estimate of the earning power of the company under the worst conditions which it is likely to meet. If a corporation does not pay its interest, and is put into bankruptcy, its affairs are thrown into confusion. Even though it is reorganized without any interruption to its business, serious damage has always resulted. In issuing bonds, therefore, conservative financiers keep in mind the danger of business depression or other unforeseen contingencies, and regulate the amount of debt to guard against the consequences of any such untoward event.

The considerations which relate to the stability of different enterprises as security for bonds can also be employed to determine the percentage of income which can safely be represented by interest on bonds. A utility company can safely assume interest payments up to a higher proportion of its income than a manufacturing company whose earnings fluctuate within much wider limits. In most cases, no more than 20 per cent of the gross earnings of a utility company should be represented by interest charges. This standard is established in one of the most stable of industries. It furnishes a limit above which, generally speaking, no company should go in pledging its earnings for the payment of interest charges.

CHAPTER XII

BONDS RESERVED UNDER MORTGAGES FOR FUTURE ISSUE

Providing for Future Capital Funds

In fixing the amount of bonds to be issued, provision must be made for future issues of capital. Under normal conditions, every corporation, if well managed, will expand its operations, and will largely increase the capital with which it begins operations in handling the increased volume of business which the growth of the country and the energy of its management will bring to it. If the capital of the company was originally obtained by an issue of bonds, it will again resort to its credit to provide funds for the enlargement of its plant. The closed corporate mortgage, however, is an obstacle to the subsequent sale of new bonds. When a mortgage authorizes $5,000,000 and no more, this amount cannot be increased without the consent of the bondholders, which is seldom obtained. The corporation is not likely to be in a position to induce the bondholder to relax the obligation of his mortgage, to permit an increase in the amount of debt which the mortgage secures. Failing this provision, the natural method for the company to adopt in raising money for extensions will be to mortgage these extensions, either directly or by organizing separate companies to issue their mortgage bonds. When the company is very strong in earnings and its first mortgage debt is small, it may also raise money by a second or general mortgage.

These methods, however, are not so effective as a first mortgage on the entire property of the company, in satisfy-

ing the demands of the investor that the bonds which he purchases should be properly secured. Take, for example, the case of a railroad building a line from Kansas City to Galveston. Upon this line is placed a first mortgage, securing an issue of bonds sufficient to pay the cost of construction. The railroad prospers and, within a few years, it is necessary to build a large amount of branch line mileage. If the first mortgage does not contain the provision, which is usual in the older mortgages, that the lien of the indenture should include all property owned or thereafter acquired, it would be possible for the company to issue bonds secured by a first mortgage upon the branches and a second mortgage upon the main line. These bonds would be inferior to the bonds secured by the first mortgage upon the main line, because the branches are not indispensable to the main line, while the main line is indispensable to the branches. The holders of bonds secured by a first mortgage upon branch lines, in case of default and foreclosure proceedings, come into possession of property which depends upon other property for its value. On the other hand, foreclosure of a mortgage upon the main line would bring into the possession of the bondholders property which could stand upon its own feet, which would not depend wholly upon the branches for its traffic, and upon which the branches would entirely depend for their earnings.

Superiority of the First Mortgage

The best security for these bonds is the lien of a first mortgage upon the entire property, a lien protecting not merely the bonds first issued, but all later issues, so that every bond may be secured by a lien upon the entire system. In case of default, holders of bonds secured by this mortgage come into the possession of the entire property. In reorganization, the owners of a large issue of first mortgage bonds which are secured by a lien upon *all* the

company's property are not called upon to make concessions to other bonds, for example, bonds secured by first mortgages on terminal properties or on essential branches, which the company must have. Recent financial plans, recognizing the value of the best security in securing a ready market and a high price for bonds, authorize amounts of first mortgage bonds sufficient to provide not merely for the original construction of the property, but for anticipated additions and improvements, as well as for converting into the bonds of the larger issue the smaller issues secured by first mortgages underlying the large mortgage as they successively mature.

Investors' Preference for a Fixed Amount of Bonds

At this point, however, we meet an objection. One of the chief advantages, from the standpoint of security, of a mortgage bond over any kind of stock, is the limitation of its issue. The buyer of a mortgage bond knows exactly what his security is in relation to the obligations outstanding against it. If $5,000,000 of first mortgage bonds are sold, the holders know that this amount can never be increased without their unanimous consent. If, however, they bought preferred or common stock, in the absence of special restrictions, there would be no limit to the increase in the number of shares, providing only that the statutory majority of stock has authorized the increase. It is necessary, therefore, in providing for a large bond reserve, to satisfy the investor that the bonds held in reserve, to be issued from time to time as the company's business expands, do not weaken the security of the bonds which he is now asked to purchase.

The bondholder should have no objection to the unlimited issue of bonds secured by the same mortgage which protects his own holdings, provided that the proceeds of the additional issues could be invested to produce an income as great or greater than that earned by the initial

investment. Indeed, from one point of view, the sale of additional bonds and their investment to yield to the business more than their interest, strengthens the position of all the bonds, especially if any large part of these excess profits are left in the business. The margin of earnings over interest charges is the protection of the bondholder's interest. The surplus of earnings over bond interest may be considered as an insurance reserve against such a reduction of earnings as might threaten the security of the bonds. If a company is well managed, and if its improvements and extensions are conservatively made, the bondholder, in theory, should have no objection to an increase of the amount of the debt secured by the same mortgage which protects his own bonds. It is, however, difficult to satisfy him that, without specific safeguards in the mortgage, his earnings will not be jeopardized by additional issues. It is also, practically speaking, impossible to communicate with all the bondholders, since many bonds are issued to bearer without registration. A reserve of bonds to be subsequently issued is, therefore, usually included in the financial plan, with such stipulations and restrictions as suffice to preserve and increase the security of existing bonds, while making the new issues equally attractive to the investor.

Restrictions on Future Bond Issues

A company arranging for a large bond reserve must provide safeguards in the mortgage which will assure the investor that the proceeds of the issues of bonds which may follow those which he buys, will be so invested as to strengthen his security. The first of these safeguards is a limitation on the amount of bonds to be issued in any one year. A company with $5,000,000 of bonds authorized, which proposes to issue $20,000,000 or $30,000,000 within a short time after the first issue of $5,000,000, might weaken the confidence of the investor in the security of his bonds.

The investor could not be made to understand why such a large investment would be necessary. He is assured on this point by such a restriction on the amount to be annually issued as appears in a mortgage of the Chicago Bell Telephone Company, which provides that no bonds in addition to the $5,000,000 sold on that date could be issued until after a certain date, and, thereafter, the trustee is permitted to certify bonds not exceeding $5,000,000 per annum.

If the same earnings are obtained on the investment of the proceeds of successive bond issues, as were shown on the first expenditure, the position of the bondholder would not be weakened. If, for example, 10 per cent is earned on the first $5,000,000 of 6 per cent bonds, the margin of security in this investment is $200,000. If 10 per cent was earned on each succeeding installment, the same percentage of marginal security would be realized. It is possible, moreover, that this margin of 4 per cent may be widened to 6 or 8 per cent, in which event, the security of all the bonds is improved.

Restrictions on Cost of Property

There is, however, always danger that this rate of earnings may not be realized. The hazards of business are kept constantly in mind by investment bankers and company officials, and in order to insure the bondholder that there will always be a wide margin of safety in the cost of any property acquired with the proceeds of subsequent issues of bonds, an ascending scale of surplus earnings over interest charges to precede additional bond issues is provided for, and bonds can also be issued only to a percentage of the cost of new property to be built out of the proceeds of their sale. Again quoting from the restrictions in the mortgage of the Chicago (Bell) Telephone Company, the "total amount of bonds issued shall at no time exceed fifty per cent of the value of the property as represented by its total

assets, no more than sixty per cent of the real estate and construction account." This protects the bondholders against an overestimate by the directors of the earnings from the new property by providing an ample margin in the value of the property above the mortgage obligations.

Such restrictions, however, are unusual. As a rule, the bondholder will be satisfied if a limitation is made similar to the following in the mortgage securing the bonds of the Pacific Telephone & Telegraph Company: "Of the first mortgage and collateral trust bonds authorized, $12,000,000 may be issued for extensions, additions, etc., but only up to 66⅔ per cent of the cost thereof." Another company is more liberal. The trust deed of this company provides that "of the remaining $25,000,000 over the $3,000,000 first issued, $22,000,000 shall be issuable only to cover actual expenses on plant and improvements, but at no time shall the amount of bonds issued exceed an amount equal to 85 per cent of such expenditures, nor shall they be issued to provide for repairs."

Restrictions Dependent on Earnings

Another form of restriction makes additional bond issues depend upon earnings. A common provision is that inserted in the mortgage of the Utica & Mohawk Valley Railroad Company where the bonds reserved "could be issued for seventy-five per cent of the actual cash cost of additions and improvements, but not until the net earnings for the preceding twelve months are equal to or exceed double the interest charge on the total amount of bonds outstanding, including those to be issued." It is better, from the standpoint of the holder, to limit the issue of new bonds with reference to the amount of surplus earnings of the company than by any other standard, although the provision that bonds can be issued only up to a reasonable percentage of the cash cost of improvements is also desirable.

Restrictions Dependent on Current Assets

A common stipulation for the protection of the holder, whether bonds are reserved or not, with a company whose business is subject to wide fluctuations, provides that a certain surplus of quick assets over liabilities should be maintained at all times. A large amount of convertible assets in proportion to its liabilities insures a company against financial embarrassment. It was a lack of quick assets that carried down the Westinghouse Electric and Manufacturing Company in 1907. In the mortgage securing the $10,000,000 of 5 per cent gold bonds issued by the Republic Iron & Steel Company the following provision appears:

> The net cash and quick assets over and above liabilities, other than the $10,000,000 of bonds and the interest thereon, shall never be less than $6,500,000 while any of the said issue of bonds remains outstanding, until the total amount of such issue of $10,000,000 not canceled, shall be less than $6,500,000, and thereafter shall never be less than the amount of such $10,000,000 of bonds at any time uncanceled. By the phrase "cash and quick assets" is meant cash in bank, good accounts and bills and notes receivable, contract notes, or similar or other securities received on the sale of products of the Republic Company, raw material, manufactured products (it being understood that the material shall be figured at actual cost without interest if cost is below the market value thereof at the time of the valuation thereof hereunder, but at market value if at such time below cost thereof). It is expressly understood and agreed that in the term raw material no ore or coal shall be included except such as has actually been mined and is then on the surface of the mines available for shipment by rail or in transit or at upper or lower lake docks, or at works.

This requirement resulted, in 1907, in the suspension by the Republic Iron & Steel Company of dividends on its preferred stock, all the cash assets of the company being necessary to preserve the stipulated margin of quick assets above liabilities.

We may summarize the restrictions upon the issue of bonds reserved to be sold under first mortgage as follows:

1. A limitation on the amount which can be sold in any one year;
2. Each installment to be restricted to a certain percentage of the cost of additions or improvements upon which the proceeds of the bonds are expended, the percentage varying with the type of property and the permanence of the business.
3. The earnings of the company shall show a substantial margin over its interest or fixed charges, including the interest charges on the new bonds.
4. In special cases, a provision that a surplus of quick assets shall always be maintained for the protection of the bondholder.

If these restrictions are included in the mortgage, the existence of a large bond reserve need cause no worry to the holders of bonds already issued under the same mortgage. The company, on its part, is enabled to raise money on the most favorable terms, and each succeeding capital expenditure, if it increases the earnings by an amount exceeding the new interest, increases the security of the bonds already outstanding. For example, assume five issues out of a bond reserve of $1,000,000 each on the 66⅔ per cent cost basis. Before each $1,000,000 of bonds are drawn from the trustee, the company must have provided $500,000 secured by the sale of stock, or out of profits, or by the issue of bonds inferior in lien to the bonds of this issue, to be invested in the property securing each installment of bonds, so that when the $5,000,000 bonds have been issued, the cost of the property which secures them is $7,500,000.

While the earnings restriction is valuable, there is danger that, in the absence of precise definition of earnings, these may be padded by neglecting repairs. Recent mortgages guard against such inflation by stipulating that a certain

percentage of gross earnings shall be spent upon repairs and renewals.

Criticism of Restrictions on Cost of Property

Of these restrictions, the third and the fourth are valuable. The first and the second are of doubtful value. As Dewing says in his *Financial Policy of Corporations:*

> The abuses of the restriction on cost are conspicuously true as regards the cost of property restrictions in public utility issues. The provision restricting the issues of new bonds to 70 or 80 per cent is susceptible of manipulation by an unscrupulous management. By making heavy charges for engineering services, heavy intermediate profits on materials furnished, and fictitious valuations for new real estate, either through the directors and their associates, or through subsidiary or allied corporations, it is possible to so inflate the construction costs that the 70 or 80 per cent which the terms of the open mortgage cover, will equal the entire actual cost.

Special Provisions for Selling Reserved Bonds

Opportunity sometimes offers to sell bonds out of a bond reserve at a good price, before the money is actually needed, as, for example, when certain property is to be purchased, title to pass at the expiration of an existing lease, or when certain underlying mortgages are to be paid out of the proceeds of bond sales when these mortgages mature. Under these circumstances, the corporation may sell the bonds and deposit the proceeds with the trustee until needed. The trustee allows savings bank interest on the bonds. The difference between savings bank interest, say, 4 per cent and the 5 or 6 per cent interest on the bonds is a premium paid by the corporation to make sure of having funds when these are required.

Advantages of the Open Mortgage

A strong tendency exists among public utility companies to select the open mortgage instead of the closed mortgage. This plan does not limit the amount of bonds, which is defined in even the largest bond reserve, but leaves the

amount indefinite, stipulating only for suitable restrictions in new issues. There is no substantial difference in point of security between an open mortgage and a mortgage providing for a large bond reserve. If the necessary restrictions are included, the position of the outstanding bonds grows stronger with each addition to their number. There is no reason to put any limit to their issue other than the limits of safety contained in the restrictions. Furthermore, the demand for transportation, for gas, water, and light service in American cities is growing so rapidly that the limits of a bond reserve, even though it may have seemed ample when first created, is in many cases, entirely too narrow to permit the provision of the necessary money by the most salable security, a first mortgage bond. While the movement in this direction is slow, I will venture the prediction that eventually all bonds will be issued under open mortgages which will be recognized as the standard form.

Term of Bonds

A new company must usually sell its bonds at lower prices than after it has become established. After its success has been determined, the bonds can be sold at higher prices. Although, therefore, the investor usually prefers a long term bond of an established company, a new company usually issues a short term bond, not exceeding twenty or thirty years. When the bonds mature, instead of selling on a 6 or 7 per cent basis, bonds to replace the issue can be sold to yield 5 or 6 per cent. The lower interest bonds are sold, and the bonds originally issued are paid off. In order to provide for refunding the bonds at lower rates of interest in advance of the maturity date, and when the credit of the company and the condition of the investment market make refunding advantageous, provision is frequently made for retiring the entire issue at the option of the company, at a premium often of 5 per cent,

a premium low enough not to prove burdensome to a company wishing to pay off a 6 per cent loan by making another loan at 5 per cent, and yet a premium which compensates the holder of the 6 per cent bonds for any inconvenience he may suffer because he is forced to change his investment.

Determining the Rate of Interest

Our next question concerns the rate of interest to be fixed on the bonds. Corporations engaged in different enterprises pay different rates of interest, depending upon what investors in that particular class of bonds are accustomed to receive. The rate of interest also varies, to some extent, with the location of the enterprise. Certain conventional rates of interest may be indicated, varying with the class of enterprise in which the corporation is engaged. Public utilities in good credit can usually borrow on first mortgage security at 5 to 6 per cent.[1] Operating utilities supplying gas, electricity, and water furnish the best security in view of their excellent performances during the depression. The investor has preferred railroads, since he believed these gave him the best security. When corporations engaged in enterprises which, from the standpoint of stability and security are inferior to the utility industry, apply for funds, the demand for their bonds is weaker than the demand for utility bonds, and consequently a higher rate of interest must be paid. The laws and customs of investing trust funds, for example, savings bank deposits, discriminate in favor of railway bonds, since such laws usually lag behind the progress of events.

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[1] Rates of interest largely increased from 1916 to 1924. With the recession of prices which set in at the second date and the superabundance of capital seeking investment, they declined. A conspicuous example was the sale of $20,000,000 general mortgage 4½ per cent bonds of the Great Northern on a 4.55 per cent basis, a decrease of more than 2 per cent from the highest yield bonds put out by the company.

Inducements Offered the Buyer of Bonds of Untried Enterprises

A new enterprise must, as a rule, either sell its bonds at a discount or give a bonus in stock. Take, for example, an industrial corporation which has excellent prospects and to which capitalists are willing to lend money. The company wishes to borrow at 6 per cent, and approaches a banker for a loan. The answer is that money can be loaned at this rate of interest to established companies with a record of earnings, interest payments, and dividends, and that, if the new company wishes funds, it must offer suitable inducements.

These inducements can take various forms. A higher interest rate might be suggested, but this would create an unfavorable impression of the quality of the security which the company offers.

Another method is to offer the bonds at a discount, which is equivalent to placing a higher rate of interest upon them. A 6 per cent bond, for example, which might be sold at par by an established company, might be offered by a new company at 80. This is equivalent to paying a higher rate of interest than 6 per cent. The corporation sells to the investor for $800 the right to receive 6 per cent on $1,000, and the further right, at the end of thirty years, to be repaid $1,000. In selling bonds at a discount, a corporation is not merely paying 6 per cent on a larger amount of money than it receives, but is also obligating itself to pay back a larger amount of principal than it receives. The sale of bonds at a discount is, therefore, less advantageous from the standpoint of the company than to offer the investor a higher rate of interest, although in practice it is more often resorted to.

It is unusual to find corporations paying more than the conventional rates of interest. The sale of bonds at a discount is more common. The reason is that investors grow suspicious when unusual rates of interest are offered, while

they may buy bonds at a discount which represent, on their face, a moderate rate, with a chance of profit by appreciation.

Another method, more frequently employed before the date of careful regulation of capital issues, in selling the bonds of a new company, is to make the creditor, in a sense, a partner in the concern by giving him with his bond one or more shares of stock, and selling him the bond at or near par. In this way the creditor is admitted to share in the profits of the concern, which may reconcile him to advancing money to new enterprises at no greater rates of interest than he could obtain from established corporations. The estimates of earning power are usually so liberal as to permit a sufficiently large issue of stock to pay the bonus on bond sales, and still leave an ample supply in the hands of the projectors of the enterprise. With no par value stock, the inducement can be offered without raising any question as to the full payment of the stock.

Still another method employed to give the bondholder more than the legal rate of interest is to grant him a participation in earnings. The Utah Tunnel Company, for example, issued notes in 1924, whose holders instead of interest were entitled to 50 per cent of net earnings. This method is legal and a few cases have been noted where it has been employed. It is better, however, from the standpoint of salability to stipulate for a participation in earnings in addition to fixed interest. The agreement is inserted in the bond that, in addition to interest, the holder shall have a share—20 to 25 per cent has been given—of the net earnings over interest. If this method could be combined with a representation of bondholders in the directorate, expressing the wishes of a bondholders' organization, an extremely attractive security can be furnished, combining the safety of the bond with the profit possibilities of stock.

CHAPTER XIII

METHODS OF PAYING FOR STOCK

Payment in Cash

We next consider the methods of paying for stock. We shall first consider the case in which the stock is paid for in whole or in part by cash. Stock sold by the corporation for cash is of two classes, assessable or full paid, according as the payment is partial or full.

Full Paid Stock

Full paid stock may be paid for at one time or in installments. When stock is issued for construction, the building of a new line of railroad or the erection of a mill, the company's payments may extend over many months. There is no purpose in securing the full amount of the subscription at one time. The money is paid as it is needed. The payments may be extended over a year or even longer. The practice is not to pay dividends on the new stock until all payments have been made, but to allow the subscribers interest on their accruing installments.

Assessable Stock

Assessable stock is of a different character. Here the payment is made part in cash and part in promises to pay cash. The subscription to $10,000 of stock, par value $100, "10 per cent paid," will be $1,000 in cash, and $9,000 in a promise to pay that amount "when, as, and if" called for by the board of directors. This promise to pay is stated on the certificate and in the subscription agreement.

The advantages of this form of stock, viewed from the

standpoint of the corporation, are considerable. The issue of assessable stock makes it possible for a company starting a new enterprise to guard against underestimates of the cost of construction. If the cost of a plant is estimated at $500,000, and subscriptions to $500,000 are secured, and if the cost is raised by unforeseen circumstances to $750,000, the directors must apply to the stockholders for additional money. This they can usually obtain only by issuing preferred stock or bonds which may not have been originally planned. It is usually difficult under such conditions to persuade stockholders to subscribe to an additional amount of common stock. They are apt to lose confidence in the managers whom they hold responsible for the mistakes in the estimates of cost, and may even oust the directors from office. A banker, interested in promoting an iron furnace enterprise in eastern Pennsylvania, remarked that it was easier to procure $2,000,000 at the outset than to secure $200,000 after $1,000,000 had been represented as all that would be necessary. If, however, the method of assessable stock is adopted, stock can be issued to $1,000,000, with an understanding, which is not, of course, a part of the subscription contract, that only $500,000 need be called. If it is necessary to raise $250,000 more, this can be secured by making additional calls, since solvent stockholders will not see their original investment imperiled by a sale of their stock by the company, which the company can do up to the amount necessary, to pay the assessments of any stockholder who does not pay.

Assessable stock has often been issued to capitalize future profits when it is not deemed prudent to pay too large a dividend. If a street railway consolidation required $15,000,000 cash, and if public sentiment will not tolerate more than 6 per cent in dividends, the new company might issue $45,000,000 of stock, calling one-third of the amount, with the balance standing as a liability of the stockholders. Six per cent dividend on $45,000,000 would be 18 per cent

on the amount paid in. This method was employed in the street railway consolidations of Philadelphia, which took final form in the Philadelphia Rapid Transit Company. As a means of evading reduction of rates by public service commissions, however, it will no longer serve. A reasonable rate of return on the value of the property is the basis of rate making, not the percentage of dividends paid.

Assessable stock is unpopular. The unpaid portion of such stock depresses its value. Investors are uncertain when directors will call assessments. When a call is made, those holders who are unable to pay must sell a portion of their stock to obtain money to pay the assessments on the remainder. These sales make the value of assessable shares irregular, and enable unscrupulous directors to profit at the expense of the stockholders. Directors may buy stock on the decline caused by forced selling following the assessment call, and selling at the advance, which, since the value of the assets back of the stock has been increased by the amount of the assessment, is likely to follow.

The investor has a rooted objection to assessable stock for two reasons: (1) because of the uncertainty as to the amount he will be called upon to pay; and (2) because of the danger of manipulation by directors who control the times and amounts of the calls. When, therefore, stock is to be sold to investors, it is generally necessary to make it full paid.[1] This can be done, either by paying for the stock in cash or by issuing it in exchange for property or services. The only way in which promoters can make a profit on stock for which they have paid in cash, is to sell this stock at a premium. Since we are dealing here with new enterprises, whose earning power is not yet demonstrated, and which must offer inducements to investors to secure funds, this method is uncertain.

[1] Assessable stock, outside of mining stock, is now seldom encountered. In mining stock it is still standard. Here the element of uncertainty is very large and arrangements for reserve capital must be made.

In Germany, where the law forbids the stock of any new enterprise to be listed for sale until the company has been in operation for a year, and where the amount of capital is strictly limited, it frequently happens that a large premium can be secured by promoters on the sale of their stock, and a considerable profit so realized. In Great Britain, where founders' shares issued to promoters, entitling their holder to a disproportionately large share of profits, are used to compensate promoters, these shares frequently sell at a high premium. In the United States, however, where the law allows immediate sale of stock, and founders' shares are not as yet employed, the risks of new enterprises are so great and the demand for banker's capital which may be temporarily invested in the securities of new enterprises, is so heavy, that little time usually elapses between the completion of the construction or consolidation and the effort to sell its securities. The investor is reluctant to purchase the securities of new enterprises except on very attractive terms. If he buys stock, the price must be sufficiently below par to show a profit by the advance in price. If bonds are employed as the principal source of capital, it is often necessary not merely to sell the bonds at a substantial discount, but also to give a bonus of stock. This bonus stock is not sold. The corporation gets no money for it except as a combination sale with the bonds, and this bonus stock, if the investor is to take it, must be full paid. Even if the buyer apparently pays nothing for this bonus stock, it must be legally *full paid* and non-assessable.

Payment in Property or Services

Some method must be employed of making stock full paid which will not require cash. This method is the issuing of stock for property or services. The laws of every state permit the directors of corporations to purchase such property as it may need by issuing its stock. Corporations are also allowed to make contracts for con-

struction work, payment for which is to be made in bonds and stocks. One of the liberal statutes permitting the purchase of property with stock is that of New Jersey. Section 49 of the General Corporation Act of New Jersey is as follows: Any corporation formed under any law of this state may purchase property, real or personal, and, except as hereinafter is prohibited, the stock of any other corporation, necessary or desirable for its business, and pay therefor in cash or its equivalent, *or in the capital stock of the purchasing corporation* to the amount of the value thereof, and the stock so issued shall be full paid stock and not liable to any further call; and any such corporation may also issue stock for the amount it actually pays for labor performed, provided that when property or stock is purchased the purchasing corporation shall receive what the same is reasonably worth at a fair *bona fide* valuation; *and provided further* that no fictitious stock shall be issued.

The corporation law of Delaware is even more liberal, especially in explicitly making the directors the judges of the value of property or services given for stock.

"Subscription to or purchase of, the capital stock of any corporation organized or to be organized under any law of this State may be paid for, wholly or partly, by cash, by labor done, by personal property or by real property or leases thereof; and the stock so issued shall be declared and taken to be full paid stock and not liable to any further call, nor shall the holder thereof be liable for any further payments under the provisions of this Chapter. And in the absence of actual fraud in the transaction, the judgment of the Directors, as to the value of such labor, property, real estate, or leases, shall be conclusive."

The method described in this section is that usually followed for making stock full paid. After the corporation is organized, the first meeting of the stockholders held, and the directors elected, a proposition is made to the directors to sell to the corporation certain property—patents, mining

property, factory property, railroads, or stocks and bonds—for all or part of the securities of the new corporation. The only limit in most states to the amount of bonds which may be issued under these circumstances is the conclusion of the directors as to their need of capital and their ability to sell the bonds. The law does, however, limit the stock "to the judgment of the directors as to the value of the property purchased." As long as this judgment is an honest judgment, and there is no suspicion of fraud in the transaction, it will be held to be final, and cannot be questioned in subsequent proceedings against the corporation.

In fixing a value for property purchased, or work done, the directors are not limited to the sum for which the property would sell for cash, or to the amount for which the services could be purchased for cash. The payments are not made in cash, but in bonds and stock. The ability of the corporation to pay interest on these bonds is yet to be proven. The profits in which the holders of this stock are to share, are yet to be realized. Any one who transfers property, or contracts to perform services in exchange for securities, can properly charge much higher prices than if he is to receive cash. The corporation, on its part, is warranted in paying a much higher price, expressed in terms of securities, than if cash is to be paid for property or services. When the vendors of property, or the contractors will agree to accept, instead of cash which the corporation might have difficulty in securing, its bonds and stock, making it unnecessary to raise more than the moderate amount of money required for working capital, when the plant is entirely paid for with "paper," they are entitled to liberal terms. The valuation placed upon property or services by directors is generally accepted by the courts.

Penalties of Overvaluation

Another problem arises in connection with the issuing of stock for property or services. Every new enterprise needs

working capital, and the financial plan must provide for this. To provide for wages, salaries, supplies, and materials a portion of the cash proceeds of the securities of the new company must be put into the treasury to serve the current needs of the corporation. The stock of the new company cannot be sold at par. It must either be sold at a discount, or given away as a bonus with bonds sold. The latter method is generally forbidden the corporation by law. However, stock can be made full paid by transferring it for property or services, and then can come into possession of the corporation by gift. The company can sell this donated stock or give it as a bonus with the sale of bonds as it sees fit. The ordinary method of accomplishing this result is for the vendors of property, who are usually interested in the company, after the stock has been full paid, to donate to the company a portion of what they have received, to be placed in the treasury and sold to provide working capital. It has sometimes been held, in the event of insolvency, that the fact that stock was given away by the incorporators was evidence that the stock had been overvalued.

The risk attaching to the overvaluation of property, when purchased with stock, arises out of the insolvency of the issuing company. If the receivers of the corporation on behalf of the creditors can prove that stock was fraudulently issued, and if he finds this stock in the possession of the original incorporators, or those for whom these incorporators were acting, the receiver acting for the creditors can recover such part of the difference between the par value of the stock and what the court considers a fair value for the property as will make up the difference between the assets and the creditors' claims. The so-called full-paid stock of the company, issued to an excessive amount, is considered assessable stock, since the corporation has not received full value. Those who have received the stock are liable for the difference between the true value and the total

par value of the stock. If, for example, $590,000 of stock is issued for property, which the court, at the suit of a receiver, finds is worth only $50,000, this gross discrepancy raises the presumption of fraud. Suppose now that, after applying all available resources to the payment of the company's debts, there remains $100,000 unpaid. Suppose, further, that the holders of this stock are solvent, able to pay. The court decrees that they are liable for the full amount of the debt on the theory that they still owe $450,000 for their stock, and the $100,000 is collected from them. If some are unable to pay, the remaining stockholders must pay the shares of the delinquents until these solvent stockholders have paid in the full amount of the deficiency on their several shares.

The theory of law under which liability attaches, is that the capital of the corporation takes the place of the individual liability of the partners, so far as the creditors are concerned, who have the right to assume that the capital of the company has been paid, either with cash or with property and services taken at a fair value. When, therefore, the company fails, or a receiver is appointed for any other cause, and the creditors prove that the stock was issued for property and services at excessive values, it is held that they can recover through the corporation from the original subscribers if they find the stock in their hands. The recovery is considered to be a realization of the assets of the company. This liability does not attach to innocent holders for value, and it is a question whether the original subscribers may not divest themselves of all liability by transferring their stock on the books of the company to purchasers who are ignorant of the fraud.

Stock without Par Value

Here appears the primary advantage of issuing stock without par value. No implied representations as to values are made by the statement that the stock of the company

is divided into so many shares. No creditor can claim that he has been deceived, and no recovery by a receiver can be had. The stock can be sold at any price which can be obtained, and the price can be raised or lowered according to the earnings of the company or the condition of the money market. There is no occasion to contract with construction companies, to accept payment in securities, or to purchase assets at high prices to be paid for in stock. Neither is it necessary to go through the farce of "donating" full-paid shares to the treasury to be sold below par to obtain working capital. Many railroad companies generally issuing par-value stock, have been forced to rely upon bonds for their capital requirements because their common stocks sell too low to make it possible to comply with the law that they must not be sold below par. Their alternative to bond sales when this par value stock cannot be sold at par is to sell preferred stock, which is opposed to the wishes of common stockholders. From every standpoint, the antediluvian restriction of "no sale below par," is to be condemned, and the use of no-par stock approved. Even if the directors by resolution state that the no-par stock is represented by property has a certain value, and that value proves excessive, no liability can be placed on the stockholders, since their stock contains no representation of value.

"Stated Value" No-Par Stock

When, however, no-par-value stock is issued with a stated minimum capital value, in creditors' proceedings, the stated capital value of each share is considered as equivalent to par value, and holders are liable for any deficiency.

When no-par stock is issued, it is common practice to set out in the certificate of incorporation a "stated minimum" of capital from which the "stated minimum" value of no-par stock can be ascertained. In case of insolvency, and if property has been purchased with this stock at an inflated value in terms of the stated minimum, or if it has

been given as bonus with bonds or preferred stock, or sold at a price below the stated minimum, the receiver of the company can force the original subscribers who have not in good faith and for value sold and transferred their stock, to repay to himself, for the benefit of the creditors, any deficiency below the stated minimum which the corporation has not received. When the capital value of no-par-value stock is thus stated, the stated minimum, for all purposes, takes the place of par value. Tax authorities, moreover, usually disregard no-par stock and treat it in some states as though it were $100 par.

The Construction Company

A device which was formerly in general use, but which the rapid adoption of no-par stock may eventually make unnecessary, is the construction company. The purchase of property with stock of a corporation directly from the owner presents no difficulty. When services are to be performed, in order to make the stock full paid, it is necessary to interpose between the final purchaser of the stock and the corporation an agency known as the construction company, which exchanges its contract for services, for the stock and bonds of the company for which the work is to be done. A construction company is not often what its name implies. As a rule, it does not expect to carry on any work of construction. It has no force of engineers at its disposal. It expects to let to others the contracts to perform the necessary work. The construction company is merely a device to make stock full paid so that it can be sold to the investor without any liability for additional payments in the event of insolvency.

A typical construction company transaction is outlined in the following:

A construction company is organized for the purpose of building a line of railroad. The shares of the construction company are offered for subscription to obtain working

capital. Simultaneously with the organization of the construction company, a railroad company is incorporated. An agreement is now made between the railroad company and the construction company for the building of a railroad, and for supplying a certain amount of equipment for its operation after completion. The construction company agrees to secure the necessary right of way, and to construct or procure for the railroad company, upon such routes as it may select for the purpose, a certain line of railroad. It is stipulated that the work to be performed by the construction company shall be in accordance with standard specifications, and under the supervision and control of the chief engineer of the railroad company. All the contracts for the grading, rails, equipment, and all other necessary work for the completion of the railroad, will be let by the construction company.

For the service of constructing the railroad and furnishing a certain amount of equipment, the railroad company agrees to deliver to the construction company a certain amount of stock, and also a certain amount of bonds for each mile constructed. The bonds issued shall be a first lien on the property, and before any bonds are delivered on behalf of the railroad company to the construction company, the trustees under the mortgage are furnished with a certificate of construction that a certain number of miles have been built. The construction company, upon the completion of its contract, becomes the owner of the stock and bonds of the railroad company, except that stock which was subscribed at the time of the incorporation of the railroad company, and that necessary for the qualification of directors.

The method of financing the construction of the railroad involves the joint use of the credit of the railroad and the construction company. At the outset, the railroad company has no property and therefore it has no credit. The construction company has a cash capital and by the use of

this capital of the construction company, the railroad company gradually comes into possession of railroad property represented by securities which form a basis for loans. An illustration of this follows.[2]

A construction company is formed with a capital of $2,500,000. Out of this capital, it purchased mining interests which cost $500,000. In order to develop this operation, a railroad company is formed, and on the strength of the balance of the capital of the construction company, contracts are let and work begins. The mileage to be constructed is 200 miles, on which stock at the rate of $16,500 per mile, and bonds at the same rate can be issued. Each mile of railroad constructed and with the equipment furnished, costs the construction company $18,000 per mile. On a mileage of 200 miles, the cost would be, approximately, $3,600,000.

Under the terms of the agreement of the construction company with the railroad company, as the work progresses in sections of so many miles, the construction company becomes entitled to bonds at $16,500 for each mile so constructed upon delivery of the certificates of the chief engineer of the railroad company certifying to such completed mileage, to the trustees under the mortgage.

After paying for its coal estate the construction company's available capital would be $2,000,000. Upon the basis of a cost of $18,000 per mile, with this capital, it can construct approximately 110 miles, under which it becomes entitled to receive bonds to the amount of $1,815,000. This will use all the available funds of the construction company. With the bonds thus received (which would be in the form of temporary certificates) it now seeks loans from financial sources, pledging these certificates as collateral, on the basis of sixty per cent of their face value. Assuming that the loan can be made with this collateral on this margin, the construction company will obtain funds for the further construction to the extent of $1,089,000, which will complete an additional sixty miles, upon completion of which the construction company will be entitled to receive bonds at the rate of $16,500 per mile, or $990,000 of bonds. To complete the remaining thirty miles under contract, the construction company will require an additional loan of $540,000, and if the same

[2] This account of the operations of a construction company was obtained from a confidential source, on the promise that no names were to be mentioned.

method of borrowing on the pledged collateral is pursued, it will require $900,000 on the $990,000 bonds received for the former sixty miles completed, which will leave in the hands of the construction company $90,000 of bonds, plus those issued for the last thirty miles ($495,000) or a total of $585,000 of bonds with all the capital stock, amounting to $3,300,000 and the coal estate costing $500,000, as assets, and with liabilities of loans to the amount of $1,629,000 and capital stock of $2,500,000.

The property of the railroad is then put into operation. The receipts and expenses are such that its earning power will be sufficient to meet the interest on the bonds, which will tend to increase their value. A syndicate is now formed to take the bonds at ninety. The $2,715,000 of bonds held as collateral are sold, realizing in cash $2,443,500. From this sum, the loans amounting to $1,629,000 with interest are paid off, realizing approximately $800,000 in cash. The $585,000 bonds among the assets of the construction company are sold at ninety, realizing in cash $526,500 which, with the $800,000 remaining from the loans, furnishes $1,326,500 of cash. With this cash the construction company's capital stock, amounting to $2,500,000, could be proportionately paid off, thus reducing it to $1,173,500 with the $3,300,000 capital stock of the railroad company and the coal estate of $500,000 as remaining assets.

In order to wind up the affairs of the company, and to distribute the stock of the railroad company to the construction company stockholders, it may be estimated that the stock is worth $25 per share (par value $50). For the 66,000 shares, $1,650,000 could be realized, which would be distributed to the stockholders out of the proceeds of the sale, amounting to $1,173,500, leaving a credit balance of $476,500, with the coal estate. It has been assumed that all the securities would be sold for cash. The various securities can be distributed among the stockholders of the construction company. The stockholders might also become members of the underwriting syndicate to take bonds at ninety.

Construction companies may make public offerings of their own stock or bonds, providing in this manner the funds necessary to carry out their obligation, and placing their own financing on a permanent basis. In such an offering, the effective appeal is based upon the profits to be made by selling the securities received in exchange for the construction work.

CHAPTER XIV

PROVISION FOR THE REPAYMENT OF BONDS

THE corporation bond is a promissory note. It differs from a bank loan only in the fact that it matures in ten, twenty, or thirty years, instead of in three months. When a promissory note matures, it must be paid, either in money or by a new note. With short time obligations, such as are given in exchange for bank loans, payment of a substantial part if not all the debt is expected at maturity. With corporation bonds, however, the custom until recent years has been to extend all or the greater part of the debt when it matures, exchanging new bonds for maturing bonds, keeping the security intact, and, if possible, increasing it. If any holder of a bond at its maturity wishes cash for his obligation, the money is obtained by selling new bonds. Bonds are generally redeemable at any time at a slight premium at the option of the corporation, a necessary feature in an expanding business where it is necessary to readjust the capital structure. For example, old first mortgage bonds may be retired, to make room for a new issue of first mortgage bonds, whose security includes the security of the issue which is retired.

Advantages of Refunding as Compared with Payment

The reasons for this practice of refunding instead of paying corporate debts lie in the relation of the bondholder to the corporation. Bonds are sold to investors who wish to secure a return on their money, with the guarantee that the principal sum will also be secured. These invest-

ments are regarded as permanent. The investor is not concerned with advance payment. He wishes the continuance of interest payments and the security of principal. If the principal of his bond is paid at maturity, he is obliged to look about for some other equally satisfactory investment, and this, at the time, may be hard to find. Should the bondholder wish to convert his bonds into cash, if the interest has been regularly paid, and the margin of net earnings over bond interest has been increased, he can usually find a market for his bond at a price equal to or greater than the price he paid. When bonds mature, it is not difficult for a sound corporation to offer a new issue in the place of maturing bonds, and secured by a first lien upon the same property. Those holders who desire to continue their investment may take the new bonds; while the money to pay those bonds whose holders desire payment can be obtained by selling new bonds to new investors. While the conditions of security are met, the bondholder is indifferent to the payment of his bond before maturity. At maturity, or by sale to other investors before maturity if he desires, he can obtain his money. The bond investor contributes capital to a company in return for a fixed and secured amount of its earnings. He asks only that interest and principal shall be secure, although he is gratified by an increase in market price.

The full payment of bonds at maturity is also apparently opposed to the interest of the corporation. Provision for repayment is usually made by using a portion of the profits in the periodical retirement of the debt, the company saving the interest on the bonds retired. The argument against accumulating a fund for the repayment of debt is similar to the argument for incurring the debt in the first place. If a company can make 10 per cent on new capital, it can safely and profitably sell bonds bearing 6 per cent interest. If, therefore, it is wise, in return for $1,000 in hand, to incur an obligation to pay $1,200 in interest—$60

per year—on a twenty-year bond, and also to agree to pay the principal at maturity, because 10 per cent or $100 per year can be earned on the $1,000, it is wise to invest $50 per year in the business of the company on which a return of 10 per cent can be made, rather than to use this $50 to retire the $1,000 of debt over twenty years.

To put the matter in another way and disregarding compound interest, $50 per year taken out of profits and invested in new property will produce $950 in profits in twenty years and the original $1,000 will still be intact in productive property, whereas, if the $50 per year is spent in redeeming the debt, the saving in interest in twenty years will be only $570, an apparent advantage of $380 in favor of the method of extending rather than paying the debt. At the end of twenty years, if these profits are reinvested to yield 10 per cent, the original $1,000, producing $100 per year, will have increased to $2,000, producing $200 per year, or more than three times the interest charges on the $1,000 of debt, which can then be renewed or a new debt incurred to obtain the money to pay the original debt.

On the other hand, there is no assurance that the sinking fund appropriation will be invested in improvements yielding an average return of 10 per cent. With a sinking fund, a certain positive gain is made each year—$50 saves $3. If invested in the business, $50 *might* make $5 a year, if the stockholders did not get the money in dividends, and if the expenditure was well planned, and if the company did not suffer some extraordinary loss. The plan usually followed by well-managed companies whose business is permanent, is to recognize the strength of both arguments, improving the security and reducing the debt, and to make provision out of earnings to retire a certain amount, one-third or one-half of their bonds before maturity, leaving the rest to be refunded into bonds of a new issue.

Types of Bonds Requiring Sinking Funds

Certain classes of business, moreover, require that bonds issued on the security of their property shall be paid before maturity. The first class of companies which must maintain sinking funds are those whose bonds are secured by a mortgage on property which is exhausted by the operations of the business. Railroad property, preserved and built up by adequate maintenance, may be supposed to last forever. Hundred-year bonds, without sinking funds, have been issued on that assumption. While, however, the physical assets may endure, their value, based on earnings, may disappear because of the competition of other forms of transportation. In this sense, railroad bonds require sinking funds whose benefits the holders have not hitherto generally enjoyed.

When, however, bonds are secured by a mortgage on seams of coal or on standing timber, or on land which is to be broken up into lots and sold, the security of the bonds is exhausted by the operations of the business. Every ton of coal mined and sold, every thousand feet of timber cut down and sent to market, lessens by so much the security of the bonds which have been issued on this property. When bonds are issued by companies operating in such industries, special provision must be made out of earnings for paying the bonds, either by installments or when they mature. The company must preserve the relation between its debt and the security for that debt, either by reducing the amount of the debt as the value of the security falls, or by replacing the coal or lumber sold with other property purchased out of its income, and there is no assurance that this can be done. Additional coal lands, for example, may not be available.

The nature of sinking funds against bonds secured by so-called "wasting" assets is seen in the following statement of the sinking fund of bonds offered by a lumber company:

The mortgage requires the deposit with the trustee of $5 per 1,000 feet, mill run, on all timber cut. It also requires the company to cut and manufacture exclusively from 15,920 acres containing 146,000,000 feet of timber, holding the remaining 38,000 acres, containing 232,000,000 feet, as a reserve, which cannot be cut during the life of this mortgage. This sinking fund should retire over $500,000 of this loan before maturity; the unpaid balance of $300,000 will then have for security the remaining 38,000 acres.

Similar plans of keeping up the sinking fund are usually followed by all companies of this character. A coal mining company will set aside 3 or 5 cents for each ton mined to make good the loss in its coal. A land company will make certain payments for each acre sold, into the hands of a trustee, or it may be required that a certain amount of the profits of a company shall be used to retire its debt. A provision sometimes met with in sinking funds based on production, is a guaranteed minimum, so that the reduction of debt at some rate shall not be interrupted by a complete suspension of operations. Sinking funds are also needful when bonds are issued by companies whose business is not plainly of an enduring character. Railroad bonds issued before the War usually carry no sinking funds, although later issues sometimes have this protection. A letter from F. J. Lisman, Investment Banker, to J. E. Eastman, Chairman of the Interstate Commerce Commission, states the case in favor of railroad bond sinking funds as follows:

If it is good business for Smith, Brown, Jones and Robinson, each to pay their debts, it is good business for them and for all of us to do so, if engaged in business in a corporate form.

I am enclosing copy of a sinking fund schedule, from which you will note that if a company pays ¼ of 1% annually for a cumulative sinking fund, this will retire an entire 5% bond issue at par in 66½ years. Similarly, a 6% bond issue will be retired in 55¼ years.

As human affairs go, 66½ years, or 2½ generations, is a long while, and no one knows whether a thing that is considered absolutely permanent to-day will be in existence at that time.

The bonds secured by companies operating interurban electric lines usually carried sinking funds, which have served in many cases, with the wholesale collapse of these companies in recent years, to lessen the losses of the bondholders. Power companies, real estate, shipping and manufacturing, and trading companies can offer to the investor no certain assurance that twenty years from the time he buys their bonds, the original value of the property securing his bonds will be intact, and that the business will be prosperous. Such companies, in order to sell their bonds, must provide for payments to a trustee from their annual earnings of an amount sufficient to pay all or the greater part of their mortgage debts at maturity.

Types of Sinking Funds

Sinking funds are divided into two classes: (1) where the company makes annual payments to a trustee; and (2) where bonds are issued under the serial plan so that a part of the principal matures each year until the entire amount is repaid within the term named.

Disposition of Sinking Fund Payments

When the first plan is adopted, the question arises, what shall the trustee do with the money which is paid to him? Several methods of disposing of these funds are available. The mortgage may provide that a certain number of bonds may be drawn by lot for retirement at a fixed price, notice being given by advertisement of the bonds so drawn; or provision may be made that an annual cash sinking fund of, say, 2½ per cent of either the original issue, or of the amount outstanding, shall be paid to the trustee, to be applied to the purchase and cancellation of these bonds at a price not exceeding, say, 105; or, if not to be had at this price, redeemed by lot at this price. In some cases, also, the bonds purchased for the sinking fund are kept alive uncanceled, and the interest on these bonds is added to

the amount set aside for bond purchases for the sinking fund, so that the rate of debt reduction increases each year by a fixed amount.

The method of drawing bonds by lot for retirement at a fixed price is objectionable to the investor because he must be on the lookout for the numbers of the bonds advertised for retirement, and he is frequently put to some trouble in finding another satisfactory investment for the money which the corporation may at any time return to him. These drawings of bonds, however, are usually for payment at a good premium over the price paid, and this premium offsets any trouble to which the investor may be put because a part of his bonds are paid to him before maturity.

The plan of purchasing bonds in the open market is, from the investor's standpoint, better than the method of drawing bonds. The bond market is less active than the stock market. Bonds are usually bought for permanent investment. Compared with stock sales, bonds come on the market less often and in smaller amounts. The taking of this small floating supply, by the purchases of the sinking fund trustee, operates to maintain a market price higher than could be had without such a regular demand. From the standpoint of the corporation, however, aside from the fact that the buyers of these bonds are apt to be well satisfied with their investment, and open to new offerings of the same kind, if the company must retire a certain par value of the bonds in each year by purchasing at the market price, it may sometimes suffer a loss because of the artificially high price resulting from the trustee's purchases.

This objection is met by provisions similar to those given above, whereby the trustee is obliged to spend $200,000 or $300,000 each year in the purchase of bonds in the open market if these can be had at or below a certain price, say 105 or 106. If enough bonds are not forthcoming at this price, the trustee may draw a sufficient number of bonds

at the price stated to consume the money in the sinking fund. This provision tends to keep down the market price to the figure at which the bonds can be drawn by the trustee for compulsory retirement.

A second alternative might be offered to the trustee in case he was not able to buy bonds at the price named in the mortgage. He might be allowed to buy other securities with the sinking fund. Some of the Burlington sinking fund mortgages contain this provision. This method, however, brings into the sinking fund an element of chance. The bonds bought for the sinking fund may rise in price, in which case the security of the bondholders will improve, or their price may fall, and the objects of the sinking fund, to the amount of the decline, will not be achieved. If bonds are bought at par for the sinking fund, to offset a debt when it comes due, and if, in the meantime, the price of the bonds falls to 95, the sinking fund lacks 5 per cent of the sum needed to pay the bonds. It is better, if any bonds are to be bought for the sinking fund, that they should be the bonds of the company which is retiring the debt, so that the reduction of debt may be certain.

Another method of using money is to invest the fund in improvements and additions. This may be provided either unconditionally at the option of the corporation, or, in case bonds cannot be purchased at a certain price for the sinking fund, as a substitute for the compulsory retirement by drawing bond numbers, the money may be invested in improvements. This investment of sinking fund money in property is, however, unusual. Because it does not certainly reduce the debt, the grand object of all sinking funds, and also because the return on these investments is to some extent doubtful, it is not favored. A variant of this method of investing sinking fund money in the business is to use the unexpended balances of the sinking fund as working capital, the trustee lending the money to the company, on good security, for example, trade acceptances

or notes received for merchandise sold to the company, and in this manner having at all times the amount of the sinking fund in liquid form.

The methods of disposing of bonds bought by the trustee for the sinking fund are as follows: (1) they may be cancelled as purchased and delivered by the trustee to the company—the usual plan; (2) they may be kept alive in the sinking fund as an obligation of the company, and the interest paid into the sinking fund as an addition to the regular sinking fund appropriations; the retirement of the bonds proceeding at an increasing rate because of the addition of the interest on the bonds in the sinking fund to the appropriations from income to purchase bonds; (3) the bonds held in the sinking fund may be resold for the benefit of the company, the proceeds being invested in productive property as when they were originally issued.)

The Serial Plan of Bond Issue

The serial plan of bond issue is illustrated by the following offering of the 7 per cent bonds of the Monsanto Chemical Works:

MATURITIES AND PRICES

$100,000	due	Mar. 1, 1921,	at	99.76
100,000	due	Sept. 1, 1921,	at	99.65
100,000	due	Mar. 1, 1922,	at	99.54
100,000	due	Sept. 1, 1922,	at	99.44
100,000	due	Mar. 1, 1923,	at	99.34
100,000	due	Sept. 1, 1923,	at	99.24
100,000	due	Mar. 1, 1924,	at	99.15
100,000	due	Sept. 1, 1924,	at	99.05
100,000	due	Mar. 1, 1925,	at	98.97
100,000	due	Sept. 1, 1925,	at	98.88
100,000	due	Mar. 1, 1926,	at	98.80
100,000	due	Sept. 1, 1926,	at	98.72
100,000	due	Mar. 1, 1927,	at	98.65
100,000	due	Sept. 1, 1927,	at	98.57
100,000	due	Mar. 1, 1928,	at	98.50

100,000 due Sept. 1, 1928, at 98.43
100,000 due Mar. 1, 1929, at 98.37
100,000 due Sept. 1, 1929, at 98.30
100,000 due Mar. 1, 1930, at 98.24
100,000 due Sept. 1, 1930, at 98.18

These bonds were offered at prices which represent a uniform yield of 7¼ per cent for all maturities, the price falling for the later maturities in order to make up in profit on redemption price, the difference between 7 per cent and 7¼ per cent yield.

These bonds offer important advantages from the selling standpoint. The short maturities are usually sold to banks, while the longer maturities appeal to the investor, individual or institutional. Banks and trust companies have always been large buyers of bonds. The purchase of long term bonds with the money of depositors is, however, no better than a speculation. The prices of these promises to pay money at dates lying far in the future fluctuate according to the movement of prices, falling as they advance and rising as they decline. A bond is a promise to pay gold. The value of gold varies directly with its purchasing power and inversely to the movement of prices. If, for example, the price of a bushel of wheat rises from $1.00 to $2.00, the value of gold in terms of wheat has decreased 50 per cent. One dollar will buy only thirty pounds, one-half bushel of wheat, instead of sixty pounds as before. The price of a bond, which is a promise to pay gold, varies with the value of gold.

It is true that commercial banks need not sustain heavy losses from declines in bond values. If the market goes against them they can get out of their holdings at small sacrifices, and when bond prices are advancing they often make fine profits.[1] All this, however, is not banking but

[1] Until the passage of the MacFadden bill in 1926, national banks could invest in bonds only by a subterfuge. The National Banking Law allowed them to buy promissory notes. A corporation bond is a promissory note, but it is not the kind of promissory note that

trading. It involves the taking of unnecessary risks, and is adopted with great caution by well-managed banking institutions. On the other hand, the banker may be unable to lend his funds to his depositors, or to purchase satisfactory commercial paper. He is forced to buy some form of corporate obligation. Short maturity serial bonds are exactly suited to his requirements. They promise to pay a definite sum within one or two years, and their security, which is a lien on real property, is, generally speaking, superior to that of the short term notes with which they compete and which are secured by bank collateral. Banks are also large buyers of long term bonds as they approach the date of maturity and pass, therefore, into the class of short term obligations. A fifty-year bond, for example, which matures on January 1, 1930, on June 30, 1929, becomes a six months' note. A special service is maintained to advise bankers of these late maturities.

Serial bonds may be coupled with other forms of sinking funds. For example, when issued by a coal company, it is usual to provide for the payment of a fixed sum per ton of coal shipped into the hands of the trustee of the mortgage securing the serials. If the sum so accumulated between serial payment dates exceeds the amount of the next payment, the surplus can be held by the trustee against subsequent payments. If the current accumulations on a tonnage basis are insufficient, the company must find the money elsewhere. It is also not unusual to find a certain percentage of the net earnings of a company paid into the trustee of a serial bond mortgage. If the company is exceptionally fortunate, its obligations may by this method be provided for in advance of their maturity.

The serial bond plan is a recognized form of sinking fund. It is a radical departure from the method formerly

the framers of the National Bank Act had in mind. The MacFadden bill expressly authorizes national banks to purchase investment bonds under regulations to be made and changed from time to time by the Comptroller of the Currency.

universal, of making no specific provision for the payment of debt, relying on the increasing value of the property and its growing earnings to furnish a basis for a new bond issue to take the place of the old. Under the serial plan, the entire bond issue, every dollar of it, will be paid at definite dates, the principal of the debt steadily and rapidly diminishing, while the security either remains the same, or, if it depreciates, as for example, when bonds are issued on the security of railway equipment which wears out with use or age, will depreciate at a lower rate than the rate of the debt payment.

There is no way for the corporation which has borrowed on the serial plan to postpone or evade its obligations. Every year $100,000, or $250,000, or $500,000 must be found, in addition to the interest. With a sinking fund based on business done—tonnage extracted or timber shipped—or a sinking fund based on net earnings, there is some measure of latitude for the company. When business is dull, sinking fund payments are reduced. With the serial plan, however, there is no respite. Each year brings its installment, which is sometimes extremely inconvenient and, because of the urgent necessity of finding the money even by forcing sales of inventory or by paying bonuses for loans, may be very costly to provide. The imminence of these short maturities also operates to limit closely a company's credit. Its bonds consist of a succession of annual or semi-annual installments of bills payable. The banker to whom a company in this situation applies for a commercial loan will be very cautious, and will probably demand special security.

On the other hand, the company which has borrowed to the limit of its resources on the serial plan has set its feet on the path that leads to solvency and prosperity. It has been said that the payment of debt should be "persistent, anxious, and increasing." These requirements are fully met by the serial plan. A company in such a position must

manage its affairs with economy and caution. High dividends and high salaries to stockholding officials are not to be thought of. Capital expenditures must be carefully considered, and the wasteful expenditures in ill-considered experiments and too rapid expansion which often attend a large and unallotted cash balance will be few. The pressure of urgent necessity is constantly bearing upon the managers. They walk always in the shadow of apprehension, and are not likely to be taken unawares by some unforeseen development.

A further advance in sinking fund method is to assign certain revenues to the trustee of the mortgage to apply on interest and sinking fund payment. Such a plan might provide that the rental of a building which secures a bond issue should be paid by the tenant, in case the entire building is rented to one tenant, to the trustee, to be applied to debt payment. This removes the possibility of default, if the rentals are sufficient for interest and sinking fund payments, as long as the tenant remains solvent, and makes it impossible for the borrowing landlord to delay or divert sinking fund payments.

Conditional Sinking Funds

A qualification must be made to the argument in favor of high sinking funds. A sinking fund represents an unconditional promise to pay a substantial amount of the principal of a debt at a definite date. Some catastrophe, such as a financial panic, or a nation-wide strike, may make this payment impossible. Shall the company, normally solvent, able to meet every obligation, be forced into bankruptcy because of such an untoward event? The creditors do not welcome such a catastrophe, which might put them, overnight, in order to get their money, into the lumber or coal business. Some relaxation of the rigid requirements of an unconditional promise to pay is demanded. Sinking funds are frequently arranged on a graduated ascending scale, *e.g.*, beginning two years after

the date of issuing the bonds. Serial payments are often arranged on a small scale at first rising to the full amount necessary to extinguish the total debt at the end of a period. For example, a ten-year bond can be arranged to mature in nine installments, the first due date being two years from the date of issue. Sinking funds may also be made cumulative in whole or in part, payments which it is impossible to make in lean years, being carried over, accumulated, to the fat years, and for a limited time cause the corporation no more embarrassment than that caused by failure to pay dividends on preferred stock.

CHAPTER XV

THE SALE OF SECURITIES

We have now reached, in the development of our corporation, the time to arrange for its permanent financing. Up to this point, the money has been advanced by the promoting syndicate. These advances are intended to be temporary. The members of the syndicate and the banks from which they have borrowed expect to be repaid when the securities are finally sold. Although the construction period may be several years, either because of unforeseen difficulties, or because it is essential that the company should make a good showing of earnings before its securities are offered for sale, the promoters wish to make this period brief. As soon as the company is in a position, because of demonstrated earnings or good prospects, to make an attractive offer of stocks or bonds, the securities are sold.

Direct and Indirect Methods of Selling

There are two alternative methods of selling securities: either to the public direct or to investment bankers. The security business is organized along lines similar to the business of producing and selling commodities. The corporation corresponds to the manufacturer, the investor to the consumer. Between the manufacturer and the consumer stands the distributor. The wholesaler, in the field of commodities, and the banker, in the field of securities, occupy similar positions. Investment banking houses are divided into houses of issue, wholesale distributors like J. P. Morgan & Company, Speyer, and Kuhn, Loeb, who

deal with the corporation, and retail firms who distribute these securities to investors and financial institutions. The line of division between houses of issue and houses of distribution is not clearly drawn, since both wholesalers and retailers at times invade the field of the other. Issue houses sell direct to large institutional buyers, and retailers often join in issue syndicates. There is also a growing tendency for issue houses to organize their own machinery of retail distribution. Conspicuous examples are the Guaranty Trust Company and the National City Company, and more recently, the Chase Securities Company, which have invaded the field of retail distribution.

The business of the private banker has assumed great importance in recent years. At one time it was thought that the distribution of securities to the public might be taken over by the commercial banker who would buy from the corporation and sell to his depositors. A number of the larger banks and trust companies have established bond departments. But while there is a certain amount sold by banks to depositors through their bond departments, as a rule, banks dispose of such bonds as they decide to sell, in the investment market, making no effort to interest their depositors, on whose funds they make a larger profit by lending them than by using them in the purchase of bonds. Bond distribution, as a branch of merchandising, does not belong to the commercial bank. It is best left to a special kind of financial institution. Certain large securities companies, however, already mentioned, the National City Company, the Chase Securities Company, and the First National Company, are owned by stockholders of banks with the same surnames, and are operated in close affiliation with these banks. The certificate of stock of the securities company is incorporated in the bank stock certificates, so that the mutual interest is permanent.

Advantages of the Investment Banker

The investment banker may advantageously carry on certain departments of the business of the commercial bank. The investment banker not only offers investment securities suitable to the needs of various classes of investors; he furnishes to investors free of charge accurate information on securities, receives accounts subject to check, and allows interest on daily balances; collects and remits dividends and interest; negotiates collateral loans for various classes of borrowers; executes orders for the purchase, sale, or exchange of securities on the stock exchanges; and, in some cases, carries on the business of foreign exchange. The investment business is, however, the primary function of the private banker. To this all his other activities are subordinated.

The retail investment banker organizes his business on the lines of a jobbing house. He has a large number of present, prospective, or potential customers on his list, sometimes running into the thousands. He circularizes these customers with letters and circulars, follows up all inquiries with attractive prospectuses, and also brings the merits of his wares to the attention of the buyer by public advertisements. The investment banker enjoys special advantages for the financing of his business. So far as possible, he aims to make his sales and purchases coincide. In an active bond market, it is not unusual that a large issue should be sold before the banker is obliged to make his final payment. When a block of bonds is to be carried, however, the investment banker employs his lines of credit with banks and trust companies, pledging the securities as collateral for loans on various margins of security, depending on the quality of the bond or stock pledged, and the conditions of the loan market. By the employment of his credit, he is able to do a large business with a comparatively small capital. A bond house with a capital of

$1,000,000 is a very substantial institution of its class, and can not only participate in important syndicates, but act as a house of issue in large transactions.

Investment bankers stand ready to purchase the securities of corporations for cash. The prices which they offer are, of course, below those which they expect to receive, the margin of profit depending on the salability of the security, and the salability usually depending on the quality, determined from an investment standpoint. The question now arises, shall the promoters of the new corporation sell the securities to bankers, or shall they offer them direct to the public? This question can be answered without serious qualification, and with few exceptions, in favor of dealing with the banker.

There are great advantages to a corporation in placing its securities with investment bankers. The cost of obtaining the required capital is definitely determined in the banker's contract. If the bonds are to be sold at 85, or 90, or 92½, the exact amount of money which will be received from these bonds is known. The money, moreover, will be paid at a definite date. The cost of selling securities to bankers is also much less than if sales are made direct to the public, and the certainty of return is far greater. The banker has a permanent organization, and an established clientele of customers. This organization is constantly employed in marketing securities. Established banking houses of good reputation have a large number of customers who will buy from no one else. They can count on a certain amount of money from these customers at regular intervals, which will be spent on the securities which they offer. They can also make a market for new securities, for which the demand may be weak at first, by exchanging these new bonds on a favorable basis for seasoned bonds of long standing, previously sold to their customers, and for which a ready market exists. With a large number of satisfied customers with whom the

banker is in constant touch, new issues of securities can be quickly sold by this method of exchange when direct sale would be difficult. Customers may not have the money to buy the new issue but they have good salable bonds and if satisfactory terms are offered, they will exchange these old bonds for bonds of the new issue. The banker then quickly disposes of the seasoned bonds. In a rising bond market where seasoned bonds, that is, bonds which are by property and earnings well established in public confidence, a very large amount of the "sale" of new issues represents their substitution for old bonds. An investor, for example, purchased in 1921 $10,000 of the first mortgage 8 per cent bonds of the Goodyear Tire & Rubber Company. At that time this company was in a bad way and had been reorganized. The bonds sold at 99. The company by 1924 fully reëstablished its position, and these bonds sold at a high premium. The company in 1927 issued $60,000,000 of 5 per cent first mortgage refunding bonds, which were offered at 97 and interest. By exchanging the unseasoned first mortgage 5s for the well-established 8s, and then quickly disposing of the 8s, the salesman could draw freely upon a large fund of purchasing power in the hands of the holders of the 8s. It is customary in such cases, to allow the purchaser a slightly lower price than the market, to encourage him to make a large exchange of old bonds for new. This shading of the market price for exchange purposes is not countenanced by the syndicate managers, but is, nevertheless, quite common. Bankers, moreover, are not obliged to force a market for the securities which they purchase. They can utilize their credit to carry stocks and bonds until a favorable time arrives for selling them.

Disadvantages of Direct Selling

A corporation engaged in the mining of coal or the operation of an oil refinery has none of the equipment for

selling securities. If it desires to sell stock direct to the public, it will be necessary for the company to construct a selling machine for the express purpose, and since it cannot keep this organization together after the necessity out of which it originated has passed, its cost will be excessive. It must rely on newspaper advertising to discover its customers, and newspaper advertising is an expensive method of selling securities. The corporation, while it might have a good credit for the purposes of its own business, would have great difficulty in establishing a credit with which to finance its venture into the security business. The commercial banker might accept a proposition coming from an investment banker to lend money on the securities of a corporation, which that investment banker had purchased for sale, and might look with extreme disfavor upon a proposition to lend on the same securities offered by the corporation direct.

There is no certainty, when the securities are offered direct by the corporation, as to the cost of selling. The usual method is to employ an advertising agency or stock-selling firm, which would undertake, without any guarantee of results, to sell the securities on the basis of a certain percentage of the proceeds. In some cases, this would run as high as 40 per cent, and the selling campaign might at that have to be abandoned before half of the securities were disposed of.[1] From every standpoint, the attempt of a company to market its securities direct will be likely to prove unsatisfactory and unsuccessful. The cost will be excessive, the results uncertain and the risks great.

A practice in common vogue governing the relations between corporations and bankers is the designation of a particular banking house as their fiscal agent, through whom all offerings of this company are made. The fiscal

[1] Securities commissions, now omnipresent, are generally opposed to these excessive commissions which, however, are customary and necessary in direct selling.

agent, in return for this preferential position, assumes a certain moral responsibility to finance the corporation, both in good times and in bad. Company officials favor this method, as contrasted with the method of competitive bidding, because of the feeling of security for new financing and refunding which this relationship gives. They know that they are ordinarily safe, that the fiscal agent will take care of them to the limit of his ability. While at times they might sell bonds at better prices by "shopping around" among bankers, the difference would be small, and in bad weather the floating borrower has no safe harbor of established relations and is frequently made to "pay through the nose." The Interstate Commerce Commission is not convinced of the advantages in all cases of fiscal agents. In the sale of certain equipment trust issues, it has required the borrowing companies to seek competitive bids. The Commission's requirement of competitive bidding is limited to the best bonds of the best companies. As yet the Commission has not seriously disturbed the established practice. A conspicuous illustration of public sale direct was the success of the New York, New Haven & Hartford Railroad Company in selling $23,000,000 of refunding bonds to investors along its own lines. Many utility companies, as shown elsewhere, have marketed large issues, mainly of preferred stock, to employees and customers.

Bankers will not purchase every kind of security. They sell to investors, and the securities which they offer must appeal to their customers. Both the investor and the speculator are so called because they buy stock or bonds of companies which are the owners of productive properties. By means of the corporation which divides its stock or debt into shares or notes of $50, $100, or $1,000 each, and which is managed by officers elected by trustees whom the stockholders select, an individual can become a part owner, or a creditor, of as large a number of corporations as his capital will allow, without identifying

himself in any way with the management. He has no concern in their affairs, save to receive his dividends or interest, or to increase his capital by selling his stocks or bonds should their price be advanced.

Broadly speaking, there are two kinds of enterprises, and two kinds of securities which these enterprises may issue: those which have been in existence a sufficient time to demonstrate their earning power; and those which have not yet demonstrated their earning power.

Examples of investment stocks are furnished by such companies as the Union Pacific Railroad, the Virginian Railway, and the Norfolk & Western, among railroads; the Standard Oil Company of New Jersey, the General Electric Company, and the National Biscuit Company, among industrials; the Boston Elevated and the Consolidated Gas Company of New York, among public utilities; the Homestake Mining Company, among mines. Each of these companies operates an established business, supplying articles or service for which there is a steady demand, and where the processes of the industry are standardized and thoroughly understood. Each one of these companies is efficiently managed. Their costs of production are low, their selling methods are efficient, and their financial management conservative. Each of these corporations has been profitable for many years. In good times, as well as in periods of depression, their net profits have been more than sufficient to pay their operating expenses and their fixed charges. Each has a record of sustained dividend payments. The directors have dealt fairly with the stockholders in paying to them such part of the profits as could be safely distributed. Any one who buys the stocks of these companies knows that profits will be earned, and that he will receive as large a part of these profits in dividends as can be prudently paid.

Requisites of Investment Securities

We have here the requisites of an investment security: security issued by a company possessing an established business, efficient management, assured profits, and a conservative distribution of profits to stockholders. If any of these characteristics are absent from a business, its securities are not entitled to investment rank, because there is no guarantee to the investor that the income, on the basis of which he buys the stock or bond, will be permanent.

Elements of Speculation

A speculation is illustrated by the stock of the Consolidated Oil Company. This company controls 120 acres of land in the Coalinga district of Southern California, touching so-called "proven land," that is, land in which paying oil wells are in operation. This company offers a portion of its capital stock for sale at one-third of its par value.

> With the proceeds it is proposed to drill a well and it is practically a certainty that we will have at least a 500 barrel well within a few months. If you have carefully read this book you will understand that the profits from this one well should drill two more and leave some money over for dividends. Then these three should produce enough to drill six more, and so on up to about twenty wells, which the company should have in two years. These twenty wells, remember, will be drilled with profits after the first one, and should make the company over $1,000,000 profits per year.[2]

The directors and promoters of this company are not known as men who have been successful in the oil business, and no representations of their previous experience are made in the prospectus. That their means are limited is shown by the fact that instead of taking advantage of

[2] Names are fictitious. The illustration is of some years ago, but it is typical.

this golden opportunity themselves, they are forced to appeal to the public to supply the means of developing their proposition.

Here are all the elements of a speculation, an enterprise which may or may not be successful. Oil is being produced in California at a profit. The property of this company, if its representations are to be believed, is near the oil reservoir. If oil is discovered, it is probable that it can be produced at a profit. So much can be said in favor of the proposition. On the other hand, there are several unfavorable considerations. Oil may not be found, or, if it is discovered, after a short time, the flow may cease. The company may not be able to store or transport this oil. The officers, even though honest, having had no previous experience, may prove incompetent. They may involve the company in obligations whose maturity may destroy the value of its stock, or they may fritter away its funds. The Consolidated Oil Company is an illustration of a type of speculation where the company has not yet come into existence, where its future operations and earnings are wholly problematical.

The Allis-Chalmers Manufacturing Company was incorporated in 1901, as a consolidation of companies manufacturing heavy engines, mining and other machinery. This company had $26,000,000 of common and $16,500,000 of preferred stock. On the latter, 7 per cent was paid from July, 1901, to February, 1904. Suspended dividends were resumed in 1917, and in 1927 the stock was retired. Until 1923 only two dividends were paid on the common stock. In 1924, 4 per cent was paid; in 1925, 5½ per cent; in 1926 and 1927, 6 per cent; in 1928, 6¾ per cent; in 1929, 7¼ per cent; all dividends were suspended in July, 1932. Although the constituent concerns continued to be profitable, the increased profits from combination were not sufficient to permit the payment of regular dividends on the new stock, which represented a large increase over the

combined stock of the merged companies. The common stock of the Allis-Chalmers Manufacturing Company may sometime prove to be an investment. This illustrates a type of security in which the business has not been as profitable as was anticipated, and where dividends could not, therefore, be regularly maintained.

The Anaconda Copper Company has paid out the greater part of its earnings to its stockholders. In times of prosperity, these stocks sell at high prices, because of this policy of liberal dividends. During a period of depression, dividend payments are correspondingly reduced. Observe the dividend record of this company:

1917.....	17%	1922.....	....	1927.....	6%
1918.....	16%	1923.....	4½%	1928.....	7%
1919.....	9%	1924.....	1½%	1929.....	13½%
1920.....	8%	1925.....	6%	1930.....	10%
1921.....	....	1926.....	6%	1931.....	2¾%

Speculative Securities and Investment Securities

The characteristics of a speculative security are the exact opposite of an investment. If a company is new, or if the efficiency of its management is doubtful, or if it has not yet come into profitable operation, or if, as happens in rare instances, it has made profits and has, by the manipulation of its accounts, concealed its large earnings from stockholders, or, finally, if it has paid out too large a percentage of profits so that it must suspend dividends when earnings decline, its stock must be regarded as speculative.

Between the best stock investments, of which the stock of the General Electric Company is an illustration, and the new stock of the Consolidated Oil Company, which stands at the bottom of the list, there are degrees of difference, and it is difficult to divide the sheep from the goats. For our present purpose, however, which is to examine the different methods of selling investment and speculative securities,

we may characterize as investments those enterprises which have already succeeded, or whose success can be predicted from the experiences of enterprises operating under conditions generally identical, as, for example, the building of a gas or water plant in a town of 30,000 people, and to distinguish from these, as speculative securities, stocks and bonds of enterprises whose success lies in the future. The characteristic of a speculation is the fact that its value depends upon circumstances which cannot be known because the future is needed to reveal them. An investment on the other hand contains no "ifs" or "provideds" or "believes." Its value is founded upon certainty. The value of a speculative security is built upon the shifting sands of probabilities and suppositions.

These two classes of securities correspond broadly to the characters of the people who buy them. The stocks and bonds of established companies, where success is certain, are purchased by investors, speculative securities by speculators. The investor will not buy a security whose value is doubtful. He demands in a stock or bond, before anything else, the quality of safety. He must be reasonably certain that his principal is safe, that he can, at any time in the future, disregarding the occasional fluctuations of the market, sell his stocks or bonds at or near the price he paid for them. If this assurance of safety of principal and certainty of income can be given him, he is satisfied with a moderate return.

The most important investors in the United States are the financial institutions, insurance companies, trust companies, banks, and large estates. These institutions demand safety before every other consideration. They are willing to pay high prices for stocks and bonds where the assurance of safety can be given. In addition to these institutions, the character of whose investments is determined not merely by prudence but by law, there are a great majority of the wealthy and well-to-do people of the country in the invest-

ing class.[3] Their chief concern is to keep what they have. They demand of the securities, into which they put their surplus income, the highest degree of safety and stability, the most complete guarantee of security.

The investor will buy government bonds, well-secured railroad bonds or guaranteed stocks of railroads, municipal bonds, bonds of electric power, gas and water companies, and the preferred issues of seasoned industrial stocks, and telephone securities. The stocks of new industrials, and of oil and mining companies he usually lets alone.[4] This investment demand, concentrated upon a portion of the securities offered for sale, fixes the value of every investment, no matter how high may be the return upon its face value, at a figure which will allow to the purchaser only a small return upon the money invested. There are few safe investments offered for sale on the New York Stock Exchange whose price, when compared with their yield in interest or dividends, shows a return of more than 6 per cent.[5]

Responsibility of the Investment Banker

When the investment banker is approached by the promoters of a new enterprise, and asked to assist in the flotation, he examines carefully the character of the project. He first demands of the securities which are offered to him

[3] A computation in 1929, based on income tax returns, showed 30,000 persons in the United States with incomes of $50,000 a year and upward. These are the main source of individual investment.

[4] Certain common stocks, American Telephone & Telegraph, United States Steel and General Electric as examples, are also bought by investors. Generally speaking, preferred stock is selected for investment over common stock, even though the margin of earnings over the established rate of dividend is no greater for the preferred than for common stock, with which it is compared. In practice, preferred dividends are fixed. They are looked upon, although this is not legally correct, as fixed obligations and are correspondingly esteemed by investors.

[5] Every investor is a potential speculator in the sense that if the bonds which he has purchased for investment rise in price, he will sell and take his profit. This does not alter the fact that his guiding principle is safety.

that they be salable. Unless he can sell them at a profit, he will have nothing to do with them. Assuming that the securities are salable, the next question is, can he recommend them to his customers? The banker is a seller of securities. By an extensive organization, covering sometimes many states, he keeps in touch with funds offered for investment. He has classified in his files the names of thousands of people who buy securities; he knows how much money they have to invest and when this money will be available. He has an organization of salesmen who make regular visits to his customers, and he carries on an extensive correspondence with prospects and old customers, to influence their purchases. This business the investment banker expects to be permanent. If he sells a bond, maturing in ten years, he has a record of that sale, and when the bond is paid, he expects to be on hand with a new bond to take the place of the old one. He aims to cultivate, by every means in his power, the goodwill of his customers. The basis of that goodwill, the foundation upon which his business must rest, is the investment quality of the securities which he offers. In his literature and through his salesmen, the banker lays primary emphasis upon safety. He recommends securities to his customers which he has bought himself before he offers them for sale. His endeavor is to protect his customers against loss. He will carry these efforts, in some cases, so far as to repurchase bonds concerning whose security there may be a doubt, or to undertake at considerable expense and trouble, the work of reorganizing bankrupt companies whose bonds he has sold, so that they may again be put upon a solvent basis.[6]

[6] Hayden and Stone, as an example, sold an issue of bonds of the Shipman Coal Company. Owing to misrepresentation by officials of the company, as to the amount of coal reserve, the bonds turned "sour" and a receiver was appointed. The bankers issued a circular to the bondholders, stating that officials of the company were liable to bondholders for the loss sustained, and that if the bondholders would assign to the bankers their several interests

A man in such a business cannot recommend speculative bonds or stocks to his clients. He might indeed sell a large amount of doubtful securities, during a period of abnormally large earnings, which would be bought from him by his clients because of their confidence in him; but when depression overtook these shaky enterprises they would go down, and with them would go the goodwill of the banker's business. A long record of successful flotations is not sufficient to protect a banking house against the discredit of offering and recommending securities which are not good, and whose quality could have been revealed by an investigation.

An illustration of the caution displayed by reputable financial institutions in standing sponsor for new and untried companies, is the following letter in answer to an inquiry concerning the merits of a Mexican mining proposition which had announced that subscriptions to its bonds would be received at a prominent trust company, large use being made of the trust company's name in the advertisements. The inquiry addressed to the trust company was as follows:

DEAR SIR: I have received certain information on the proposition offered by the ———— ————. These reports are extremely interesting, and I have given them careful attention. I should like, however, to have your own opinion of the merits of the debenture bonds as a safe investment.

The Corporation ————, by its Vice-President, Mr. ——, has heartily recommended them, and I presume you will have no hesitation in confirming his statement that he believes them to be a safe and profitable investment.

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in any recoveries from these officials, proceedings against whom would be undertaken at the bankers' expense, they would reimburse these bondholders in full when the cases were finally decided. The amount involved was $800,000. This offer by bankers, because of its size, was looked upon as unusual. In another case, however, another banking firm brought out an issue of silk bonds, which, because of misrepresentation as to current assets, also went bad. While the bankers assisted in the reorganization, they did not, so far as known, reimburse any bondholders.

The reply of the trust company is as follows:

DEAR SIR: We have your favor of the 18th inst. In reply thereto would say that following our invariable policy, we regret our inability to advise you in the matter of the investment referred to. Our duty is merely to receive such subscriptions as may be tendered on behalf of the _____ _____, and we have been selected to countersign the bonds. The parties interested in the matter have come to us properly recommended.

The statements contained in the advertisement and circulars are the statements of the _____ and not of this Company.

Yours very truly,
(Signed) _____ _____,
Second Vice President.

If the securities of the new company are speculative, the banker cannot purchase them and offer them as his own property to his customers. He can, however, insure or guarantee their sale. The trust company just mentioned could have been interested in these bonds at its own risk, or by lending to officers and directors on the security of the bonds, without openly indorsing them, unless the use of its name as the depositary of the mining company may be regarded as an indorsement.

Banker Management

In recent years investment bankers have gone so far as to identify themselves with the management of the concerns which they finance, and even to assume responsibility for the management by means of voting trusts or special issues of stock carrying the right to elect a majority of the directors. Dillon, Read & Company have been most prominently identified with this new development. Investment bankers have always kept in close touch with the companies for which they act as fiscal agents. Many railroads, for example, are known as Morgan roads or Kuhn, Loeb roads. These banking houses, until the Clayton Act forbade the practice, were represented by partners or associates of the directors of corporations whose securities they sold.

The 1926 report of the Industrial Securities Committee of the Investment Bankers' Association has this to say concerning banker management of enterprises through the holding of management stock (or by voting trusts):

First of all, domination of a corporate voting stock carries with it responsibilities of the most serious nature. Whenever a house of issue elects to retain the domination of a company's affairs, it must be prepared to accept fully the responsibility that goes with it, and to act with the impartial purpose of doing only what may be best for the company and for the public. All this probably means the expansion of its activities along business lines for which as an organization it may have no special aptitude nor means of securing satisfactory personnel.

Second, it is by no means certain that the courts will exercise the same measure of control in the case of a majority action of stockholders where all common stock is entitled to vote, as in the case of a majority action of stockholders where only a part of the common stock is entitled to vote. Claims of mismanagement and negligence on the part of controlling directors and officers, and perhaps the controlling stockholders, might be listened to by the courts with a more attentive ear in the latter case than in the former. New laws, statutes, common law and equity are made to fit new cases so that the legal rights of voting common stocks where non-voting common stocks exist may carry with them obligations, the exact nature of which cannot at the time of issue be determined, and which, if it could be known, it would not be good judgment to assume.

The Interstate Commerce Commission in several recent rulings has considered the relationship between bankers and railroads, and in certain equipment trust issues has ordered the bonds opened to public bidding, believing that for securities of this character better prices could be obtained than by selling to one banking house. This method is general in the case of municipal bonds and as the railroad and utility bonds more closely approach the security of public bonds, we may expect that the Interstate Commerce Commission and the State Utility Commissions will eventually follow the plan of competitive bidding. As

yet, however, the sale of securities through fiscal agents, investment banking houses, is the prevailing method. Not until the railroad situation is entirely stabilized and the companies grouped into a few large systems can the hitherto indispensable services of the investment bankers in marketing railway securities be dispensed with.[7]

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[7] The reputation of many prominent investment bankers has been seriously damaged by the wholesale defaults of the past three years, especially in the default of foreign government bonds. Although in most cases they acted in good faith and after reasonable investigation, the fact that over $800,000,000 of these bonds are (October 1, 1932) in default and are selling at small fractions of their issue prices is convincing evidence that the bankers' judgment was bad.

The grief of the purchasers of these bonds is not lessened by the disclosure before a Senate committee that certain houses of issue hold none of the bonds which they sold to American investors. Of course, it is not the business of the banker to buy bonds for investment. He is a trader, not an investor. Yet, it must be admitted that some of these bankers will find that the way back to the investor's confidence is long, steep, and stony. On the other hand, some bankers who kept out of this dangerous foreign field have greatly enhanced their reputations as investment advisers.

CHAPTER XVI

THE SALE OF SPECULATIVE SECURITIES

If the securities of a new corporation cannot be sold to the banker for resale to the investor, they must be sold to the "public." This is composed of persons of moderate or small means who are willing to buy the shares of new companies at low prices, trusting in the representations of those who have stocks to sell, that these stocks will pay large dividends and eventually increase in value. The speculative buyer has usually no knowledge of finance. He does not understand the nature of an investment judgment. He thinks of a stock as $100 and regards its dividends as certain and permanent. He has no skill in offsetting advantages with disadvantages. With him a security is either good or bad. There is no halfway point. If the salesman sets before him all the materials for an investment judgment of the proposition, he cannot make such a judgment. If, moreover, the difficulties and uncertainties which deter the investor from buying speculative stocks should be presented to the speculative buyer, he would be frightened away. If these negative considerations are not presented, however, he will not ask for them nor will he suspect their existence. Great care must therefore be taken to give him only the most simple and favorable information concerning the stock. The "public" asks few questions—save as to the standing of the officers and directors of the new company, for they naturally do not want to be robbed, and the amount of dividends which is promised to its stockholders.

Elements of the Prospectus

The first step in the process of selling stock to a speculative buyer is to excite his imagination. There must be placed before him a picture of enormous wealth in which he is invited to share. In actual existence there is nothing save a flat plain, a precipitous mountain, or a prospect of monopoly profits. The speculator must furnish the money to ascertain what lies below the surface, and if there is anything found, to develop it. But in order that the speculator shall advance these funds, he must be made to disregard the present and project his gaze into the future. He must behold, in a vision, a fully equipped mining property or oil well, and he must see himself as part owner of this valuable property. In view of this necessity, the general arrangement of a prospectus, no matter of what enterprise it treats, is always the same.

An Optimistic Forecast

The project contains some new feature—a new resource or invention, a new form of industrial organization, oil land in California, gold or copper deposits in Canada, real estate on the frontier of Brooklyn, or options on competing plants. The development of these resources and opportunities is to be followed by large earnings. The reasons for this belief are forcibly set forth. The mine is either directly adjoining a fully developed property which is paying large dividends, or the geological indications point unmistakably to the existence of a resource of great value. Similar enterprises in other parts of the country have proved enormously profitable. The present scheme is fundamentally identical with these enterprises. Therefore, the present scheme will be equally successful.

Expert Testimony

A mass of expert testimony of this or that "professor," whose wealth of technical detail is most convincing, is

usually added. Note, for example, the following extract from an expert's opinion of the Monterey district:

> . . . The geological formation of the oil-bearing strata and extensive surface indications of petroleum seem to indicate the certainty of there being productive resources of oil below. Sandstone and shale of a bituminous character seem to be the general surface indications of petroleum. There are apparently three anticlinal ridges extending through this range which the oil belts seem to follow. Judging from the croppings, the west side of the Salinas Valley contains a vast oil reservoir. I have formed this conclusion on account of the immense depth and thickness of the oil-bearing sands and also the immense beds of bituminous shale.

Perhaps the "professor" has a record of success to enforce his statements. He may "stake his reputation" on the success of this last project which he indorses, and which he believes to be "far richer than United Verde," a mine which paid $2,924,000 dividends in one year.

Accompanying the expert's reports will be maps and charts showing the exact location of the property, if the proposition is for a mining or oil enterprise, in relation to producing mines or wells, these latter being always in the immediate neighborhood of the land of the new company or else "the geological formation on this claim is identical with that found on the largest dividend paying properties in the district." The National and State Geographical Surveys are dragged in to support the expert testimony.

Newspaper accounts of the "fabulous richness of the Kootenay country," or "Wonderful Tonopah, a Desert Camp of Fabulous Richness," written for local newspapers, or the more sober narratives of the metropolitan journals, also excite the imagination of the speculator. Such news items as the following appear in metropolitan journals:

> NEVADA, *January* 27th—At the Tonopah camp the most impressive things are the huge stacks of ore awaiting shipment. Henry Cutting, who came into the camp early last year with only $2.50 in his pocket, has one stack which is estimated to be

worth $500,000. Another man who has been very lucky is Frank Golden, who has a great stack of sacks of ore like a fort, which is worth $700,000.

Strongly worded testimonials may be added to the schedule of evidence. The project is backed by substantial business men, often by men of national reputation—won in some other field—who publicly advise their friends, as did an ex-governor of a western state, to "provide for the children" by investing a few dollars in rubber certificates. The best of bank references are also given.

All this mass of skillfully arranged data leading the mind almost imperceptibly from the known to the unknown, emphasizing advantages to the point of exaggeration, glossing over difficulties or preferably remaining silent about them, marshaling history, science, and reputation to the support of prophecy—all these specious and forceful arguments are directed to the end of creating in the mind of the prospective buyer a vision of enormous wealth. It is but seldom that they fail to accomplish the result. If it were possible, a sympathetic examination of their literature would deceive the very elect.

The Appeal to Cupidity

Cupidity is the next passion to which the promoter appeals. The stock in these companies whose prospects of large profits are so well assured, is offered at a low price, 50 cents, $1, or $2.50 per share, some indeed as low as 5 cents a share. The company issuing the stock, it is stated, is in possession of a resource of enormous value. Only a small amount of money is needed to develop the mine or drill the well—"in order to facilitate the development of the valuable lands of this company, the directors have placed on the market a limited amount of its treasury stock to be sold at the special introductory price of twenty cents per share, and the company reserves"—mark this, oppor-

tunity knocks only once—"the right to advance the price of the same without notice." After the initial expenditure, it is claimed, the enterprise will grow out of its own earnings.

As for assured dividends, "marvelous and monstrous" is the only phrase that adequately describes them. It is a poor company that cannot assure the investor 20 per cent on his money. Note, for example, the following: "The value of this stock as an investment may readily be seen when it is understood that one well producing 100 barrels of oil daily will earn four per cent of the entire capitalization, or twenty per cent on the present selling price of the stock." The company in question had room for 150 wells on its property and the inference of the prospectus is that dividends of 1,000 per cent on the investment are by no means out of the question.

If the speculator asks for conclusive evidence that these huge dividends will be paid—let him look to the record of other enterprises which had at the outset no better prospects than that into which he is asked to put his money. "In one instance, about one and one-half years ago, $1,200 was invested in three sections of oil land in one oil district. To-day these same lands are worth $5,000,000. In another instance, $3,200 was invested in two sections. To-day these two sections are worth $6,000,000." Specimen advances in oil stocks are given, for example: "The New York Oil Company sold at fifty cents per share, present market price $200"; or "the Home Oil Company sold at $10 per share, present market price $5,000." Or, if the proposition is in gold or copper mining, figures like these are given: "United Verde once sold for fifty cents a share and is now paying nearly 8,700 per cent on that price. The LeRoi Mine was sold entire in 1890 for $12.50; it now has a market value of $10,000,000—$100 invested in LeRoi a few years ago is now worth $250,000 and has paid $35,000 in dividends. Alaska Treadwell has paid $5,000,000 in divi-

CHAPTER XIX

CAPITALIZATION OF CORPORATIONS

We have now examined in some detail the materials out of which the promoters and bankers of the proposed company are to make their financial plan, their scheme of capitalization. We have next to determine the amounts of these various securities which shall, under various conditions, be issued.

Factors Affecting the Program of Issues

Two questions are to be answered: first, how much money is required by the new company? This has been answered in the original investigation. Second, how is this money to be provided, by whom and by the purchase of what securities. If the new venture is to be privately financed, that is, financed by those who expect to make money out of its earnings, instead of by selling its stock, a very simple form of capitalization will suffice. Stock will be issued up to the amount thought to be necessary. If the managers look to the future, they may provide a reserve in this stock, calling only a portion of the par value or subscription price, leaving the balance available to supply future capital needs. This method is frequently employed by financial institutions in England, where the item "rest" is used to identify the amount of uncalled capital. It is less popular in the United States where a prejudice exists against partly paid stock. Here it is the custom with small private companies to start with common stock subscriptions, advance to preferred stock, and finish with some form of bond, as

their original ideas expand, or their underestimates of cost must be corrected.

When money is to be raised from the outside investor the procedure is different. Various conditions may be present which will influence the amount and kind of securities to be offered.

1. A Construction Proposition in an Established Industry

The new enterprise may be a construction proposition in some established and well-understood line of industry, railroads, coal, copper, oil, or textiles, in which (*a*) the stock or bonds may be sold, or (*b*) retained until a showing of earnings has been made so that a better price may be obtained for such part of the securities as may be available for sale. Here the amount of stock and bonds issued will be based upon a conservative, that is, moderate, estimate of earnings. The minimum amount of money is the cost of the plant plus working capital. So much must be raised. The amount of cash which can be obtained by the sale of these securities after the company is on its feet, firmly established as a going concern, will be much greater. In anticipation of this happy event, the capitalization, that is, the number of shares of stock, plus bonds, if the financial plan includes bonds, may be fixed at an amount far above the minimum requirements, the securities being paid for by methods which will be presently explained. In this case, however, the bounds of conservatism are not intentionally passed. Those responsible for starting the enterprise expect to continue their connection. They are, by subscription, loans, or underwriting guaranties, interested in the success of the new company. They expect their interest to be more than temporary. A conservative estimate of earnings is still the basis of capitalization. Dividend and interest requirements will be kept well within the limit of probable earnings. The prospects for contin-

uous dividends of stock issued under these circumstances are good.]

The Public Service and Interstate Commerce Commissions perform a useful service in investigating the bases of proposed security issues. Sometimes they make serious mistakes, as when the Interstate Commerce Commission approved the sale by the Seaboard–All Florida Railway Company of $25,000,000 of bonds to build a line from West Palm Beach 100 miles to Florida City. In this case the anticipated earnings did not materialize, and the bonds are now of little value. On the other hand, the Commission saved an immense loss when it vetoed Mr. L. F. Loree's project for a new trunk line across Pennsylvania. In view of later developments, this project would have bankrupted its competitors and would probably have failed.

Another illustration of the basis of capitalizing a new enterprise operating in an established industry and under known conditions, is the Rio Grande Valley Gas Company. The prospectus was issued April, 1927. The capitalization of the company was as follows:

		Charges
First mortgage 7 per cent bonds.....	$3,500,000	$245,000
7 per cent cumulative preferred stock.	1,700,000	119,000
Common stock without par value, shares	265,000	
		$364,000

The promoters must justify charges and preferred dividends of $364,000 per year. They do this as follows, quoting from the prospectus: "This rapidly growing territory with a population of 175,000, and an area of 1,500 square miles, is said to produce agricultural tonnage in excess of any equal area in the United States, and has also substantial industrial activities."

Uniform franchises without burdensome restrictions have been granted. . . The company has an exclusive contract

for a period of ten years with the Central Power & Light Company (an Insull Property), to supply fuel for that company's generating station at San Benito. Other long term contracts will be made to supply fuel to other large industrial consumers. The company's gas supply is assured under definite contracts with representative producers. These fields constitute, in the opinion of geologists, a dependable source of gas extending beyond the life of these bonds. The following estimate of earnings has been made by Ford, Bacon and Davis after a detailed survey of both domestic and industrial demand immediately available in the communities to be served:

	1st Year	3rd Year	5th Year
Gross Income	$836,800	$1,338,864	$1,631,066
Operating Expenses and local taxes	341,800	482,965	562,670
Net available for interest and depreciation	495,000	865,719	1,068,396

Here is a conservative capitalization of a new company operating an established industry in a new territory. The engineers, on the basis of wide experience in these investigations, are able to estimate both revenues and expenses with approximate accuracy. As a rule, they will err, if at all, on the side of understatement. The capitalization of this company can be regarded as conservative.

2. A Flotation in a New Industry

The new company may be a public flotation designed to exploit some new industrial opportunity where the standards of judgment are unformed. The best illustration of such projects were the so-called industrial trusts or holding companies, which were floated in large numbers from 1898 to 1902, the United States Steel Corporation being the largest. Here the basis of capitalization was anticipated earnings. Since the information from which

to make an informed estimate of earnings was lacking, and because the securities issued were to be quickly sold, first by underwriters, and second, by owners of properties taken into the consolidation, these estimates were liberal, often to the point of exaggeration. The United States Steel Corporation, for example, was formed with a capital stock of approximately $1,000,000,000 plus $300,000,000 of bonds. It was a combination of combinations, a "trust of trusts," bringing together under one ownership over 60 per cent of the steel-producing capacity of the United States. Nothing like it had ever been known. And yet leading banking firms indorsed it, recommended its securities and marketed large amounts of them, no doubt in the honest belief that they would pay dividends. In this case, due in part to the large profits of the War, after some early disappointments—common dividends were suspended from 1905 to 1909—expectations were realized. After fifteen years the common stock, against which there was originally no corresponding value in assets, became an apparently secure dividend payer. This was a public flotation, based largely on prospects, and the apparent limit of the capitalization was future earnings, their amount being based on hypothesis and conjecture, with a strong infusion of hopeful anticipation.

It would be going too far to assert that the basis of capitalization in such cases is the maximum net return—in cash—to the promoters, bankers, and vendors, the amount of securities whose sale will produce the largest obtainable amount of money. Aside from the criminal branch of the security-selling fraternity, these men are honest and honorable—quite as honest and even more honorable, because of the confidential nature of their interrelations, than many reputable vendors of merchandise. More concentrated exaggeration can be found, in the writer's opinion, in the advertising pages of one Sunday newspaper than in a year of bond and stock circulars issued by repu-

table houses. They are not in business to defraud the public. They believe in the merits of the securities which they offer, even if the business supporting those securities is speculative in character. But they take the seller's viewpoint, and they puff and overpraise their wares. Their predictions are frequently repudiated by the outcome of enterprises which they promote, and their basis of capitalization is, in many cases, shown by subsequent developments to be excessive. The standard set for the second class of companies is anticipated earnings, based not on the opinion of those who are to hold the securities, but of those who are to sell them and profit from their sale.

Exploits of a character similar to the flotation of the Steel Trust are seldom met with in these latter days. The investment banking fraternity is so numerous and influential, their assistance is so necessary in the marketing of securities to the investor, and the investor himself is so much better informed than ever before, that the wild schemes of the past generation, no matter how well sponsored, could have small chance of success. It would be too much to say that the present basis of capitalization of new enterprises is certainty. It is no longer possibility. Perhaps reasonable probability is the accepted standard.

3. A Public Utility Enterprise

The new company may be a public utility enterprise, which will supply a necessity of city life—gas, water, transportation, electricity, or heat—to large numbers of people grouped under the head of the "public." In this case, a special method has been worked out primarily to safeguard the public, which also protects the investor.

Public service corporations must obtain the authorization of the Public Service Commission for the issue of securities. These commissions are found in almost every state. In twenty-eight states, however, the commissions have been clothed with sufficient powers to make their work really

effective. These are the states which contain most of the public utility enterprises. The supervisory and regulative powers of the commissions extend to character of service, to rates and fares, and to the approval of the issue of securities. In this last power, the investor finds a considerable safeguard against the improper issue of stocks and bonds.

Control by Public Service Commissions

The nature of this power over security issues is indicated by the following extract from Section 55 of the Act Creating the Public Service Commissions of New York:

> Any common carrier, railroad corporation or street railroad corporation organized under the laws of the State of New York, may issue stocks, bonds, notes or other evidences of indebtedness payable at periods of more than twelve months after the date thereof, when necessary for the acquisition of property, the construction, completion, extension or improvement of its facilities, or for the discharge or lawful refunding of its obligations, provided and not otherwise that there shall have been secured from the proper commission, an order authorizing such issue, and the amount thereof, and stating that, in the opinion of the commission, the use of the capital secured by the issue of such stock, bonds, notes, or other evidences of indebtedness is reasonably required for the said purposes of the corporation. For the purpose of enabling it to determine whether it should issue such an order, the commission shall make such inquiry or investigation, hold such hearings and examine such witnesses, books, papers, documents or contracts as it may deem of importance in enabling it to reach a determination.

Under this power, every corporation proposing to issue or authorize new securities must apply to the Public Service Commission for authority, and the authority will not be given until a thorough investigation has been made into the security back of the bonds and the purposes for which the money is to be spent.

Standards of Commission Judgment of Proposed Issues

The primary purpose of giving the commissions power over issues of securities was to protect the public against excessive issues of capital by public service corporations. It was claimed that excessive capitalization might be used to defend rates or prices which were also excessive. In the exercise of this power, however, the commissions have gone much further. They have undertaken to protect the investor against unwise capital expenditures. The Commission of the Second District of New York outlined its method of procedure in cases involving the authorization of bond issues as follows:

> In passing upon the application for leave to issue additional capital stock, the Commission will consider:
>
> Whether there is reasonable prospect of fair return upon the investment proposed, to the end that securities having apparent worth but actually little or no value may not be issued with our sanction.
>
> We think that to a reasonable extent the interests of the investing public should be considered by us in passing upon these applications.
>
> The Commission should satisfy itself that, in a general way, the venture will be likely to prove commercially feasible, but it should not undertake to reach and announce a definite conclusion that the new construction or improvement actually constitutes a safe or attractive basis for investment. Commercial enterprises depend for their success upon so many conditions which cannot be foreseen or reckoned with in advance, that the duty of the Commission is discharged as to applications of this character when it has satisfied itself that the contemplated purpose is a fair business proposition.

In practice, however, the commission has made such careful investigation as to warrant the conclusion that for them to authorize a bond issue is equal to their assurance that the bonds are good. In the case of the Rochester, Corning, and Elmira Traction Company, the commission outlined in detail the methods of investigation which it proposed to

follow in determining the amount of bonds which could be safely issued by a newly organized enterprise, as follows:

An estimate will be made from a consideration of the results of operation of existing roads of the probable gross earnings.

An estimate will be made in like manner of the probable operating expenses, taxes, and depreciation charges.

The excess of earnings over the disbursements which must be made before fixed charges can be met represents the sum which is applicable to fixed charges.

The maximum bond issue which will be allowed must be determined by the sum thus ascertained to be applicable to the payment of the interest charge.

No bond issue should be permitted creating an interest charge beyond an amount which it is reasonably certain can be met from the net earnings.

Stock representing a cash investment should be required to an amount sufficient to afford a moral guarantee that in the judgment of those investing the enterprise is likely to prove commercially successful.

The order authorizing such stock and bond issues will contain approximate provisions designed to secure the construction of the road in accordance with the plans and specifications upon which the authorization was made and not in excess of the actual requirements.

If the allowance proves inadequate for the required purposes, an application for further capitalization may be made, upon which application the expenditure of the proceeds of stock and bonds already authorized must be shown in detail.

Protection of Existing Companies by Commissions

When a public service commission has authorized the issue of securities, it is by implication bound to protect the company whose application it has authorized, not merely against the ill-advised action of its directors in using the credit of the company for improper purposes, but also against competing enterprises for which there is no public necessity and which would not, therefore, prove profitable. The New York Public Service Commission for the Second District, for example, refused the application of the Buf-

falo, Rochester & Eastern Railroad Company for authority to issue securities for the construction of a line of railroad from Buffalo to Albany, paralleling the line of the New York Central, on the ground that the new enterprise would not be profitable, and the New York Central would be injured without any public benefit resulting. The new line proposed to interchange traffic at Albany with lines traversing New England, but the commission pointed out that the New England lines were not able to handle the traffic already delivered to them at Albany. This was sufficient reason for refusing to authorize the construction of another line which would make the congestion at the Hudson River even more acute.

A recent illustration of this protection is the denial by the Public Service Commission of New York of certificates of convenience and necessity to eight out of ten bus lines which had been granted franchises by the City Council of Yonkers to compete with the lines of the Third Avenue Railroad Company. A very serious danger to the Third Avenue Railroad Company, was, by this refusal, averted. On the other hand, there has been a general consent to applications by steam and electric railroads to be permitted to operate bus lines to supplement existing facilities. In some cases, the monopoly position of the utility is definitely recognized in advance. For example, the certificate of necessity and convenience issued by the Wyoming Public Utility Commission to the Intermountain Water & Power Company of Denver, protects the company from competition from any other public utility company that might, in the future, attempt to provide water to its territory.

Implied Guaranty of Public Service Commissions

At the time the New York Public Service Commissions were instituted, apprehensions were expressed by financial interests lest the new laws, because they took away from the directors and stockholders of corporations so much of

the control which they had previously exercised over the issues of new capital, would interfere with the efforts of companies to provide funds for development. Indeed, the passage of the New York law produced a feeling of consternation among bankers and investors. As the commissions have progressed with their work, however, they have been forced into the position of morally guaranteeing every security whose issue they approve. So favorably are the public service commissions regarded by the investor, as a result of the interpretation which they have placed upon their powers, that the bond salesman offering a security whose issue they have approved has his work of persuasion largely accomplished. In one case the issue of bonds by a Massachusetts company secured by the stocks of two other companies, and with its own stock owned by a fourth, presenting a situation almost incomprehensible, were readily sold, in the main for no other reason than that they were issued under the authority of the Massachusetts Commission. Bond dealers and large investors cordially approve the control of security issues by public service commissions, because of the assurance which this public supervision gives to the investor that his interest will be safeguarded.

Supervision of Railroad Issues by the Interstate Commerce Commission

The principle of supervision and authentication of railroad securities by the Interstate Commerce Commission has been included in the Esch-Cummins bill, by which the powers of the state commissions are curtailed. The Interstate Commerce Commission now passes upon the purposes of the issue, the security offered, and the terms of sale. The position of railway securities will be greatly improved by this act, since not only will existing lines be protected against competitive constructions, but the Commission may be expected to assume some responsibility for

allowing rates adequate to protect interest and dividends on the securities which it has authorized.

The nature of the protection given to railway investments by the Interstate Commerce Commission is shown in the adverse recommendation by the Examiner of the Commission on the application of the New York, Pennsylvania & Chicago Railway in 1925 to construct a new line across Pennsylvania. This application was for the construction of a line from Allegheny City to Easton, Pennsylvania. The New York *Times,* October 6, 1925, stated that: "The tentative report recommending denial of the application was made by Assistant Director C. V. Burnside, of the Finance Division of the Interstate Commerce Commission, and Engineer Examiner Edward Gray. They held that arguments as to damage to existing trunk-line systems (Pennsylvania, Baltimore & Ohio, and New York Central), should be given consideration, that 'there is no urgent need for the proposed line,' and that the existing lines are handling the through traffic between New York and the West in a reasonably satisfactory manner. Backers of the so-called Loree Route (L. F. Loree, President of the Delaware & Hudson) did not prove to the satisfaction of the Commission that there would be any great amount of new local traffic developed, and the experts held that the almost exclusive function of the new line would be the movement of through business between New York, Pittsburgh, and points west. The Commission's experts indicated that even granting the need of a new line, as proposed, this line should be built and owned by the existing trunk lines."

4. Capitalization of a Going Concern for Resale

The final form of capitalization concerns the purchase of a going concern for resale to the investor. Here the basis of valuation is the established earning power of the business. This is expressed in a certain number of years'

purchase of earnings, as it is called, depending on the hazards of the business. A hydroelectric property, for example, sells at a higher price, compared with its earnings, than an automobile manufacturing concern. A bakery will sell at a higher price than a radio concern. The usual method of handling these transactions is a sale of the stock to the bankers, a recapitalization, and the sale of the new securities to the public. Dodge Brothers, Victor Talking Machine, and the National Cash Register Company are recent illustrations.

The stock of the Victor Talking Machine Company was sold on January 6, 1926, to a syndicate headed by Seligman & Company and Speyer & Company. The authorized stock of the company was increased from $35,500,000 to $49,130,000, divided into first and second preferred par-value stock, and no-par common. Ten months after issue, the common stock, 575,685 shares, was selling at 42, the first preferred at 98, and the second preferred at 94. The value of the company at that date may be estimated as follows on the basis of market quotations:

Common Stock, 575,685 shares, no par value.....	$24,178,770
Prior Preferred Stock, $20,934,000 par.....	20,515,320
Convertible Preferred, 122,115 shares, no par value	11,478,810
	$56,172,900

The stock was sold to bankers at a gross price of $40,250,000. The total assets of the company about the time of sale were estimated at $54,161,062, of which $25,129,913 represented current assets. This value is slightly below the market value of the stock after a sufficient time had elapsed for the market quotations to find their true level. Earnings for 1926 were $8,423,177, so that the company conforms closely to the standard of a 15 to 20 per cent basis for a concern of medium risk.

Dodge Brothers was reported sold to Dillon, Read &

Company in 1924 for $146,000,000 cash. Its value in 1927, exclusive of the class B common stock, which had the exclusive voting power and was presumably held by the bankers, was about $145,500,000, on the basis of market quotations for its securities, slightly less than the purchase price. The net earnings in 1927 were $9,641,426. The property was, therefore, to be classified as medium risk, sold on a 20 per cent basis, and evidently purchased at too high a price. Earnings declined during 1927, and the value of the securities declined. The company was finally absorbed by the Chrysler Company.

Bases of Valuing Industries for Sale

Dewing, quoting Badger, then of the Harvard Graduate School of Business Administration, gives the following suggested basis for purchasing going concerns:

Class 1, Low risk, 12—14.99 per cent
Class 2, Medium risk, 15—19.99 per cent
Class 3, High risk, 20—25 per cent
Class 4, Very high risk, over 25 per cent

Into which class a business falls can only be determined by consideration of the special circumstances surrounding it. A manufacturing business such as the Eastman Kodak Company, with a long and uninterrupted career of success, enjoying a monopoly based on patents and high prestige, based on current market quotations for the common stock, is much more valuable than, for example, a sugar refining company which has no special advantages except large capital and which is exposed to competition. The Eastman Kodak common stock is worth, at present quotations, $35,000,000, showing $9.50 earned, and a surplus of $71,370,000. The American Sugar Refining Company is worth $115,850,000.

Industries vary in selling value not only with earnings but even more with the degree of investment favor which

they enjoy. As an extreme case, I remember a lighting company in Indiana whose market value, expressed in stocks and bonds, was $150,000, while a newspaper property in the same town and with the same earnings, was valued by its owner at $15,000.

This investment reputation is constantly changing. Interurban electric companies in high repute before the War, now cannot be sold, and New England textile mills are in very poor favor with the investor, although a few years ago they stood high. The value of gas plants is rapidly increasing, with the prospect of expanding the outlet in industrial and house heating, while the value of oil companies is shrinking, due to overproduction of crude. Each case of valuation, in the last analysis, must be considered separately, and stock market quotations averaged over reasonably long periods are the best, indeed the only, indication of value.

CHAPTER XX

CAPITALIZATION AND PUBLIC WELFARE

Overcapitalization Defined

We are next concerned with the relation of capitalization to public welfare. There is a general belief that many of the most serious evils of our economic life are traceable to the excessive capitalization of corporations, and that some plan should be devised by which the evil of overcapitalization may be eliminated. Senate Bill No. 2941, introduced July 5, 1911, by Senator Newlands of Nevada, aimed to provide for the registration under federal authority of corporations engaged in interstate commerce, gave in Section 10, a definition of overcapitalization as follows:

> The Commission . . . may revoke the registration of any such corporation upon the ground of overcapitalization; that is to say upon the ground that the par value of the total securities, including shares of stock and all obligations running for a term of —— years or more, of such corporations, issued and outstanding at any time clearly exceeds the true value of the property of the corporation at that time. In determining such true value the said Commission shall consider the original cost of such property, its present replacement cost, its present market value, including the good will of the corporation's business, and the fair value of the services rendered in the organization of such corporation. . . .

This definition is that currently accepted. If the face or par value of the shares of stock and the bonds issued by a corporation exceed the fair value of its property, including goodwill, patents, franchises, and other forms of intangible wealth, that corporation is said to be overcapitalized.

Various methods are available for determining this fair value. If we look on a corporation as a going concern, operated for profit, its value can be expressed as a certain number of years' purchase of its average profits. If, for example, a company earns an amount of $50,000 a year for five years, and if it is operating a business of a temporary or extra hazardous character, such as the exploitation of a patent, it may not be worth more than two or three years' purchase of its profits, $100,000 to $150,000. A railroad company, on the other hand, with the same profits, might sell for twelve years' purchase, or $600,000.

Corporations are seldom sold for cash. The usual method of disposing of them is to sell their stock, both their assets and the debts secured by those assets being taken over by the purchaser. The current or market measure of the value of a corporation is, therefore, the amount for which its stock can be sold. If its bonds are worth par, and its stock is sold for one-half of its par value, or $50 a share, then assuming that the capital is equally divided between stock and bonds, the company is 25 per cent overcapitalized. Its capitalization is $2,000,000, let us say, but the selling value of the evidences of debt and shares of stock, the tokens and symbols of its capitalization, is only $1,500,000. On the other hand, a condition of undercapitalization would be revealed by a price of $200 for the stock. A par value of $2,000,000 would, in this event, be worth $4,000,000, an undercapitalization of 33⅓ per cent. If we accept this standard of capitalization, the use of the terms "over" and "under" implies that a company is only "properly" capitalized when the par value of its securities outstanding is equivalent to their market value.

An acceptance of this definition compels us to go further and approve the practice known as "stock watering" or "the capitalization of earnings." A company pays 24 per cent on its stock. As a result of these large dividends, the

stock sells at a high premium, say $350 a share on a par of $100. This company is "undercapitalized." That its stock capital may be reduced to a "proper" basis, the number of shares must be raised from 10,000, on which 24 per cent is paid, to 40,000 on which the dividend will be 6 per cent, and which, if the business is reasonably secure, may be expected to sell around par, a "proper" capitalization. If, therefore, the capitalization of corporations is limited to the "fair" value of their business, and if the standard of selling value or market price is applied to determine that value, many extravagant and outrageous abuses of capitalization might be prevented, a result which would be most desirable, but, at the same time, the practice of stock watering, the multiplication of shares of stock as earnings and profits increase, would be sanctioned.

Objections to Overcapitalization

The treatment of stock watering, as a method of distributing the accumulated surplus of a corporation, is reserved for a later chapter. At this point, I wish to consider briefly the alleged necessity of strict regulation of the capitalization of corporations in the interest of the public welfare. It has been often charged that the increase of capital of a corporation without the addition of new funds is opposed to the interests of the community for the following reasons:

1. The corporation is obliged to pay dividends on this extra, or "watered" stock, which results in higher prices of product to the public than the prices which would suffice to pay dividends on an "honest" capitalization.

2. The payment of dividends on a capital larger than the cost of duplicating the corporation's equipment is an inducement to competition, which results in an unnecessary duplication of railroads and mills.

3. The issue of securities for which no cash equivalent has been received often results in the sale of large amounts

of worthless stocks and bonds to the uninstructed public. These arguments refer to matters of great importance and merit a careful consideration.

Relation between Capitalization and Prices

Every business concern, no matter on what basis it has been capitalized, fixes its prices at the point of largest return. A corporation is not in business for the benefit of its customers, but for its own benefit. Its prices are not fixed according to what the buyer would prefer to pay, but are based upon what he can be made to pay. If a corporation has a monopoly of a product, it will fix its price at the point of maximum net return, *i.e.*, at that point where, account being taken of the larger consumption at low prices and the decreased cost of production with large output, and, on the other hand, of the decreased cost of distributing a smaller output and the higher prices at which a reduced output can be sold, the net return will be the largest. If the corporation has competitors, its prices will be influenced by the quotations of its rivals. In no case will lower prices be charged than the self-interest of the seller directs.

The fallacy that the natural tendency of business men is to charge a "proper price" has dominated the argument against the capitalization of railway corporations. They have been charged with maintaining exorbitant rates in order to pay dividends on watered stock, although they have always, in so far as public opinion would allow them, determined their charges by the exigencies of competition, and by the principle of charging what the traffic will bear, that is to say, the rates which will produce the largest profits in traffic movement. The pressure for dividends has sometimes influenced a board of directors to take undue advantage of a temporary opportunity to exact high prices or high rates; but if prices or rates were higher than the traffic would bear, the effect of such extortion was to reduce

the profits of the corporation below the figure at which more moderate charges would have placed them

Railway corporations have sometimes been able to prevent a reduction of rates by railroad commissions, by making it appear that the proposed schedules of rates would render impossible the payment of interest or dividends on issues of bonds or stocks which bore no reference to the capital originally invested in the road, but which were looked upon by the courts as constituting a vested interest in the hands of innocent holders whose rights must be protected. But although the watering of stocks and bonds may thus have been made, at times, a means of securing a corporation in the revenues of monopoly, by interposing an innocent third party, the investor, between the corporation and the public power; from the company's standpoint it has nothing to do with fixing the schedule of charges upon which the revenues depend. The number of pieces of paper representing the ownership of a steel corporation, and which entitle their holders to share pro rata in any disbursements of profits which the directors may make, has no more to do with the price of steel rails or steel billets than the number of persons among whom those pieces of paper may be divided. Both steel and oil are sold for the prices which will produce the maximum profit, and there is no more reason why that price should advance because the capital is increased than that the capital should decrease because the price is reduced. The same charge is made against the corporation profits tax—that the producer or dealer is forced to add the amount of the tax to his price, thus shifting its burden to the consumer. On the contrary, the seller charges the most profitable price he can obtain, tax or no tax.

Incidence of the Corporation Tax

The corporation tax, a 12 per cent charge on profits, rests finally where it is first paid. The consumer pays no

part of it, since, if the tax-paying corporation had been able to charge higher prices, and if those higher prices had produced more revenue, the higher prices would have been charged. Taxes paid by public utility companies, aside from income taxes, restricted in their earnings by law to a fixed return on their investment, are shifted to the consumer, because the legal return is calculated after these taxes are deducted, along with operating expenses, from gross earnings. For example, the Consolidated Gas Company of New York, paid over $17,000,000 in taxes in 1927, and received a net income of $54,000,000, equal to 6+ per cent on its assets to property. If these taxes were to be remitted, the price of gas must be reduced because the return would then rise above the legal maximum. The last report of the company explains this matter as follows:

> The taxes charged as part of the operating costs of the consolidated company——totaled $17,314,270 during 1927——. The burden thus imposed and reflected in the Company's rates, amounted to nearly 16 per cent of the total operating costs of the gas and electric business. The tax collecting function thus added 13.05 cents per 1,000 cubic feet on the average to the required rate for gas. . . .

Profits are derived from differential advantages possessed by those companies which make profits, advantages in capital, personnel, location, patents, and luck; in other words, profits represent the gains of monopoly.

Capitalization and Competition

The claim that the existence of watered stock stimulates competition has stronger authority to support it. Thus *The Wall Street Journal* says:

> Any plant which is overcapitalized and which pays dividends on overcapitalization, invites competition by announcing that a competitor capitalizing his plant at its true value can earn dividends. If there is overcapitalization, there is certain to be com-

petition. . . . It is an economic law that profits in any line of business will not continue to exceed a fair return on the capital invested in the plant.

In other words, it is claimed that the competitors of the United States Steel Corporation, for example, are encouraged to press forward, by the belief that the sum of the figures set out on the faces of the shares and bonds of that company represents an amount in excess of its investment value.

Within limits, this opinion is well founded. An excessive capitalization on which dividends are being paid is certainly a protection to outside companies. Upon this subject, some remarks of *The Iron Age* on the occasion of the formation of the Steel Trust are of interest:

Probably none have greater occasion to rejoice at the turn which affairs have taken than the outside interests. The majority of the latter express themselves as well pleased with the formation of the great consolidation. Above all, they hold that a less aggressive policy will be pursued than has characterized some of the constituent interests, and that they will be gainers from the greater steadiness which is sure to characterize the markets. They frankly admit, too, that they see increased safety to their own interests in the fact that the corporation must provide for large fixed charges and will probably make efforts to earn a good return on that part of their capital which they pronounce "water." That means that living prices must be maintained—prices which will give them an opportunity to make a profit on their own investments.

In other words, the large capital of the Steel Trust would, in the opinion of its competitors, influence its managers to a more pacific and conciliatory policy than was formerly pursued, for example, by the Carnegie Steel Company, and would render them less ready to resent outside invasion of their territory. The policy of the corporation shows that this expectation was well founded, and has probably influenced the competitors of the steel corporation to in-

crease their productive capacity more rapidly than they would otherwise have done.

Indications have not been lacking of more sinister influences of overcapitalization. In an endeavor to market their stock, the men temporarily in control of certain corporations have marked up prices to exorbitant figures, and have given large encouragement to competitors. Charges have also been made that many plants have been built for the sole purpose of selling them out to some company which was endeavoring to retain control of a particular industry. These two variants from established business practice may, perhaps, be cited as further evidence that overcapitalization stimulates competition.

But while so much may be conceded to the theory that overcapitalization stimulates competition, on the general proposition, denial must be made. A man engages in a business because he sees an opportunity to make a profit by producing or buying commodities at one price or cost, and selling them at a higher price. He does not look to the capitalization or the dividends of his competitors when forming a final judgment as to the profit of an enterprise. Large dividends on large capital may call his attention to the profits of an industry, but the factors determining a change in his investment are the conditions of the industry and the prospects of the market.

A group of men proposing to engage in the manufacture of steel rails, for example, would take into account the following factors: (1) the supply and cost of raw material; (2) cost of labor; (3) the construction cost; (4) the transportation rates; and (5) the prospective demand for steel rails. They would next turn their attention to the position of the manufacturers already in the field, and here the capitalization of competitors would be considered. But the decisive considerations which influence any scheme for building competing plants are the cost of production and the demand for the product. The dividends of competitors are

not to be relied on as a guide to profits. These may be concealed or exaggerated. The foundation of conservative judgment consists of the known facts of the industry.

Overcapitalization and the Issue of Worthless Securities

The third objection to the method of capitalizing a corporation, on the basis of value instead of investment or cost of replacement, is founded on the claim that such capitalization leads to the issue of large amounts of worthless securities. We may admit that the method of capitalizing earnings generally employed in the United States has, in the days that we hope are gone forever, resulted in deluging the speculative public with the stocks and bonds of new enterprises whose prospective earnings are seldom realized. The evils resulting from these practices are generally recognized and deplored. It must be admitted also, that the enforcement of a law which would limit the issue of capital to the amount actually invested in an enterprise would have the effect of banishing from the stock exchanges low-priced, speculative securities.

Overcapitalization and Public Service Corporation Charges

In the field of public service corporations, railroads, street railroads, gas, and water companies, the alleged evils of overcapitalization are most serious. We hear much of the watered stock of our railroads, of the overcapitalization tax of our municipal monopolies. The organs and instructors of the public have labored diligently to fix in the minds of the voters the conviction that the overcapitalization of a public service corporation results in a tax upon the patrons of the monopoly to pay interest and dividends on the watered capital. Even if the advocates of this view admit that a railroad or a street railroad company, no matter what their capitalization, will make all they can out of their business, and will only regard their debt or the

number of shares of their capital stock when they come to divide their gains, the critics of overcapitalization still contend that by multiplying bonds and stocks, these companies are able to conceal their earnings, to keep the public in ignorance of what they are making, and in this way to safeguard their ill-gotten gains.

This opinion is incorrect. It is true that, in many instances, the stock or bonds of a company have been increased in order to keep a more or less supposititious "public" in ignorance of its real earnings; or to invoke the aid of the law against proposed reductions of rates of charge, on the ground that the enforcement of the new tariffs would result in injury to the innocent investor. This has been particularly true of street railway and gas companies, where uniform charges invite a horizontal reduction of rates by the legislature. Excessive capitalization as a protective device against legislative interference is, at best, however, a recourse of doubtful value. If, in the opinion of the court, the public policy demands a reduction of charges, the bondholder will have to take the consequences.

A holder of stock in the American Sugar Refining Company could not successfully plead his "vested interest" in opposition to a proposal to remove the differential on refined sugar; nor could a holder of People's Gas or Interborough Company stock have much hope of success in a plea against a reduction of his dividends by some act of the municipal legislature. As a rule, the public policy will prevail with the court, and while care will be taken to allow a fair return to capital, and while the court will be especially careful not to force a company into bankruptcy by approving a reduction in rates which would make the payment of interest impossible, if it came to an issue between public interest and private interest, the private interest must give way. Although such appeals for the protection of vested interests have been success-

fully made, no well-informed investor would pay for the bonds—for example, of a gas company, whose charges were threatened with a reduction by act of the legislature —a price which would express his conviction that a court would be influenced by the argument that interest or dividends on bonds or stock issued without adequate consideration in cash or property would be endangered by such legislation, to declare the reduction unconstitutional. Stock watering is no reliable defense against legislative attack.

Cases Defining Reasonable Return and Fair Value

The question of the reasonableness of rates, from the point of view of the investor's interest, has been frequently raised in suits brought to restrain the reduction of rates by railroad commissions. The United States Supreme Court, while admitting that the investor's rights should be considered, has gone on record as upholding the interests of the public to be paramount to any other interest. The most forcible expression of this view is contained in the opinion in the Nebraska Maximum Freight Rate case:

> The rights of the public would be ignored, if rates for the transportation of persons or property on a railroad are exacted without reference to the fair value of the property used for the public, or the fair value of the services rendered, but in order simply that the corporation may meet operating expenses, pay the interest on its obligations, and declare a dividend to stockholders.

The principles underlying the regulation of the rates and prices of public service corporations have been finally settled by a line of decisions in the Federal courts. These companies are entitled, irrespective of the amount of their debt or the number of shares into which their capital stock may be divided, to a "reasonable return" on the "fair value" of their property. A leading case which illustrates and confirms this principle is that of William R. Wilcox, *et al.*, constituting the Public Service Commission, etc., of

New York, *vs.* The Consolidated Gas Company of New York. This case was decided by the United States Supreme Court on January 4, 1909.

The New York legislature and the Gas Commission of New York had ordered that after May 1, 1906, 80 cents per thousand feet should be the maximum price charged for gas in New York City. The Consolidated Gas Company had resisted the order, and had obtained from the United States Circuit Court for the Southern District of New York an injunction restraining the defendants, who had succeeded to the Gas Commission, from enforcing the provisions of the act on the ground that the 80-cent rate would not yield the Consolidated Gas Company a fair return on the value of its property, and that the act establishing that rate was, therefore, in violation of the Fourteenth Amendment to the Federal Constitution. It was not contended that the new rate would reduce the company's dividend rate, but the objection was that the "net income" would be reduced below what was "reasonable."

The method employed by the master in chancery, to whom the case was referred for ascertaining the "fair value" of the property of the Consolidated Gas Company, was to find the cost of reproducing its physical plant, $47,000,000, and to add to this sum $12,000,000 as the value of its franchises—its right to do business in New York City. This value of franchises was arrived at by adding to $7,781,000, which the defendant corporation had paid for these franchises in 1884, the same proportionate increase that the value of the tangible property in 1905 showed over the value in 1884.

The Supreme Court rejected this method of valuation. It accepted the original franchise value of $7,781,000 since the Consolidated Gas Company had taken them over at that figure. It accepted also the value of $47,000,000 for the tangible assets which had been taken by the lower court. The Supreme Court, however, rejected the increase

in franchise value, the value of the exclusive privilege to sell gas on Manhattan Island, taking the position that the increase in the value of the franchise was due to the high rates which had been charged, and that the company had no right to presume that it would be left free to charge these rates in the future. The Supreme Court declared that the property of a corporation on which it is entitled to charge rates which will yield it a reasonable return, includes its physical property at the reproduction value, plus any franchises which it may have purchased. It is impossible, in the light of this decision, for a stockholder to set up the plea of vested interest against a reduction of the rates charged by the company in which he has purchased stock. All that the investor can be assured of is a reasonable return on the "fair value" of the property which his company owns. The Supreme Court, in the same decision, established a fair rate of return on the property of the Consolidated Gas Company. Owing to the security of earnings offered by this monopoly, this "fair rate" was declared to be 6 per cent. Applying the 6 per cent rate to the ascertained value of the "tangible property" in which the Supreme Court made a slight reduction, and allowing for the increased consumption due to the lower price of gas, the 80-cent rate, it was found, would yield a net revenue of at least 6 per cent on the fair value of the property.[1]

In the Minnesota Rate Cases, the Court accepted the cost of reproduction as the method of determining the fair value of the property, and applied to this a 7 per cent rate as that to which an investor in the railway busi-

[1] This rate, after a long drawn-out legal controversy, has again been advanced to $1.15 per thousand feet. The same principles of rate determination were employed as in the original case, and the District Court decided that a rate of $1 per thousand which had been established by act of the Legislature in 1923 was confiscatory in that it did not yield 5 per cent on the fair value of the company's property. This decision was upheld by the United States Supreme Court.

ness—more hazardous than the business of supplying gas in a large city—was properly entitled.

Capitalizing Reasonable Return

In neither case were the rights of the stockholders to receive a given rate of dividends on their stock regarded by the court. The stockholder has no right to dividends which can be pleaded against the public interest. The corporation, as distinct from its creditors and stockholders, has a right to a reasonable return on the fair value of its property employed in the public service. The income which represents this reasonable return the company can divide according to its pleasure. If, for example, the fair value of a railroad company's property is $100,000,000, a reasonable return would be $7,000,000. Assuming an equal division of the capitalization between stock and bonds, and that the bonds bear 4½ per cent interest, $2,250,000 would be devoted to interest and $4,750,000 to dividends, at the rate of 9½ per cent on the stock. Now, the company might double its stock capital, raising it to $100,000,000 and on this it could pay 4¾ per cent, or it might cut its stock capital in two, reducing it to $25,000,000, on which the dividend would be 19 per cent. This apportionment of the company's income would be no concern of the courts, although the Public Service Commission of a state might exercise authority over it, as in New York and Wisconsin, or the Interstate Commerce Commission under the Esch-Cummins Act, by which issues of capital are closely restricted. All that the Federal courts are concerned to do, however, is to protect the public against exorbitant charges, to limit the income of public service corporations to what is fair and reasonable. Questions of capitalization, over or under, as the case may be, do not concern them.

Public Valuation as a Basis for Rate-Making

The principles of public valuation as a basis of rate-making have recently been restated by the Interstate Commerce Commission in the O'Fallon case. This proceeding was brought to determine the amount of net earnings which the O'Fallon Company, a small railroad in St. Louis, should pay to the United States under the recapture clause of the Transportation Act of 1920. This act provides that one-half of all net earnings in excess of 6 per cent on the value of railroad property shall be paid into a fund out of which loans may be made to weak roads under the authority of the Interstate Commerce Commission. The remaining half of these excess earnings shall be retained by the carrier but not distributed to stockholders.

The Commission, in valuing the O'Fallon Railroad property, established the following principle of valuation. First, the cost of reproducing the property as of 1914 is determined. Allowance is then made for the loss in value of this property by use. To the sum remaining is added the value of railway lands—terminals, right of way, etc.—as of 1914, a figure based upon the value of adjoining properties. The result is the present value of the railroad property of 1914. To this sum, to determine the value of the property in 1927, for example, is added the cost of all additions to operating property and land purchased from 1914 to 1927, less any loss in value of such operating property.

This method of valuation will be applied by the Interstate Commerce Commission unless and until it is revised by the courts. The Supreme Court, in valuation cases, has shown a tendency to accept the present cost of reproduction, less loss in value from use as the basis of valuing utility property. This cost depends on the movement of prices and wages and on the improvements in the various branches of railway construction. The Commis-

sion in its decision points out the wide fluctuations in railway construction costs since the War, and argues that to accept a basis of valuation so irregular and unstable would introduce an undesirable element of speculation into railway valuation, while its own method as set out in the O'Fallon decision is calculable, definite, and certain. The United States Supreme Court to which the O'Fallon case was appealed, refused to accept the valuation formula adopted by the commission on the ground that it did not give sufficient importance to cost of reproduction, which the majority of the court has consistently held is a controlling factor in determining value. The commission must, therefore, revise its method of valuation in the light of the Supreme Court's decision.

CHAPTER XXI

PUBLIC PROTECTION AGAINST FRAUDULENT SECURITY ISSUES

RECOGNIZING the heavy losses inflicted upon the community by the activities of the promoters of "wild cat" companies, a determined effort has been made by the legislators of various states to abolish or abate this evil. These efforts have taken the form of "blue sky laws," so called because of the reputed habit of the speculative promoter in capitalizing the sky above him.

Blue Sky Laws

The first of these laws was passed by Kansas in 1911. The object of the law was to guard the investor against the numerous companies selling stocks and securities of little or no value. The law compels all companies, persons, or agents who desire to sell any stock, bonds, or other securities in the state to submit information to the banking department which will enable the department to determine the good faith of their project—this includes full details of the business basis of the proposition, a copy of all contracts, bonds, or instruments to be made or sold, the name and location of the investment company, an itemized account of its actual financial condition, the amount of its assets and liabilities, together with such other information as the bank commissioner may require. Foreign corporations must file consent that actions may be commenced against them in the proper court of any county by the service of process on the Secretary of State, and that such service shall be as binding as if commenced against the company itself. It is the duty of the bank commissioner

to examine all statements filed, "and if he find such company solvent and that the proposed plan and contracts provide for fair, just and equitable transaction of business, and in his judgment, promises a fair return on the stocks, bonds and other securities by it offered for sale, he shall issue a statement declaring that the said company has complied with the act and is entitled to do business in the state." Without the approval of the commissioner, an investment company cannot do business in the state of Kansas and a violation of this law is considered a misdemeanor, punishable by fine or imprisonment, or both. The investment company is also compelled to file with the commissioner semiannual statements of financial condition and such other statements as he requires, and, if they fail to do so, they may be denied the right to do business within the state.

These blue sky laws have been passed in a large number of states (42)—most of them modeled on the Kansas Act. The constitutionality of these laws, which was successfully attacked in the lower court as a regulation of interstate commerce, has been upheld by the United States Supreme Court "as a regulation of business," which constrains conduct only to that end, the purpose being to protect the public against the imposition of unsubstantial schemes and the securities based upon them. In general, these laws fall into two classes: (1) fraud acts and (2) regulatory acts.[1] The first class is illustrated by the Martin Act of New York, which empowers the attorney-general to investigate the activities of any individual or organization suspected of fraudulent acts in connection with the sale of securities, and pending the institution of criminal action for fraud, when evidence is discovered, to obtain an injunction against further sale of the securities in question. This act was amended in 1925 to provide for publica-

[1] Most of the material in this chapter is taken from an unpublished study by Dr. Forrest B. Ashby, Wharton School of Finance and Commerce, University of Pennsylvania.

tion of the name of every securities dealer, and the name of, issue of, and address of, every security offered for sale.

Provisions of Regulatory Statutes

The second class of regulatory statutes includes the licensing of dealers and permits to sell individual issues of securities, also providing for specific approval of securities. Of these the Kansas statute, summarized above, is a good illustration.

This type of blue sky statute usually contains a list of exceptions to which the provisions of the act do not apply, usually including all public bonds, such as government, state and municipal issues, and the securities of local public service corporations. All other securities must be accepted by the Commission before sale. "To obtain such approval the person qualifying the security must furnish comprehensive information concerning the issuing company, its character, type of business, powers, properties and financial structure, while additional information may be required at any time. Appraisals, investigations, and audits may be made at the expense of the applicant."

The state commission, under the regulatory statutes, imposes additional conditions before admitting securities to sale. A good example of such supplementary restriction is the following circular issued by the Pennsylvania Securities Commission relating to the sale of real estate mortgage bonds:

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF BANKING
BUREAU OF SECURITIES

HARRISBURG
November 26, 1926

To All Dealers Registered under the Securities Act:

Hereafter, real estate bonds, issued under a mortgage secured by assets that are to be acquired or partially acquired from the proceeds of the sale of the bonds, will not be permitted to be

sold in Pennsylvania unless the manner in which they are issued complies with the following requirements:

1. The trustee shall not be directly or indirectly connected with either the borrower or the house or firm selling the bonds. Preferably the trustee should be a trust company in or near the city in which the property securing the mortgage is located.

2. The bonds are to be delivered directly to the trustee and held until the trustee receives payment for them.

The effect to be that the trustee will have either the bonds or cash.

3. The proceeds from the sale of the bonds are to be held by the trustee and paid out directly upon the proper certification.

4. It must be provided that all other financing be done and all the cash that is to go into the property over and above the proceeds of the bond issue be put into the property *before* the trustee will release any of the first mortgage funds.

The effect to be that the borrower's funds are to go into the property first and the proceeds of the first mortgage bonds to go in last, so that the trustee will, when starting to pay out funds, have sufficient on hand to complete the building.

5. The trustee will deliver the bonds to the concern or house selling them only upon payment of the agreed purchase price per bond.

The effect to be that the selling concern will not receive commissions or profit until the bonds are sold.

6. In the event permanent bonds are not immediately available for delivery, the temporary instrument must be one executed by the borrower and trustee, and not an instrument of the concern or firm selling the bonds.

The effect to be that the purchasers of first mortgage real estate bonds will always have either the permanent bond or an instrument representing the bond of the borrower.

7. All payments for interest and sinking fund are to be made by the borrower direct to the trustee.

The effect to be that the trustee will not pay interest on bonds when due if he or it has not received the funds from the borrower.

The above is not to be construed to mean that merely because an issue of first mortgage real estate bonds complies with the above that it will be permitted to be sold in Pennsylvania. The definite details in connection with each issue, such as actual cost of land and building together with bases for appraisals will be thoroughly investigated in the future and be considered in

connection with the general plan of business of the dealer who proposes offering the bonds for sale.

Very truly yours,

W. J. FALLOWS,
Deputy Secretary.

This circular follows closely the recommendations in the 1926 report of the Committee on Real Estate Bonds of the Investment Bankers' Association of America. Each point indicates a separate practice in this field, which, in the interest of the investor, should be corrected. The benefits of such regulation in enforcing upon issuing houses and corporations the rules of sound investment are apparent.

Other provisions are: that the issuing company shall escrow promoters' stock exchanged for patents and services until other stock is on a paying basis; that sales commissions shall be limited; that an undue burden of fixed charges shall not be assumed and that non-voting stock shall not be issued. In general, the securities commission of the regulatory type attempts to impose upon the promoters of new enterprises the standards of sound financial organization and management and to exclude from the privileges of the local securities market all dealers or agents of dealers whose reputation is bad, or whose plan of doing business does not appeal to the judgment of the commission as sound and wise.

Benefits of Public Regulation

As to the benefits of this supervision and regulation, there can be little question that, in so far as it curtails the harmful activities of the fraudulent stock salesman—and evidence is abundant that the restriction of these transactions has been considerable—the blue sky commission must be approved. In so far as the regulations and admonitions of the commissions have enforced sound financial methods of financial construction and administration, for example, the restrictions in real estate mortgage indentures by the

Pennsylvania Securities Commission given above, their work is useful and essential. Nor can the alleged interference with legitimate security sales be considered a serious objection. Many securities are exempt. The states in which most of the income available for investment is concentrated, such as New York, Pennsylvania, New Jersey, and the New England states, do not present in their blue sky regulations any serious obstacle to a free sale of investment securities.

Objections to Blue Sky Laws

The objection is urged against the blue sky laws that the machinery of their enforcement is weak and ineffective. This does not seem to be true of blue sky laws more than of any other statute. The usual penalties of fine and imprisonment for selling securities without a license are provided, and their application only awaits proof of guilt. No doubt state banking commissioners are open to political influence. They are also afraid of the public scandals involved in losses to investors from the purchase of securities which they have approved. I know of one enterprise of doubtful merit whose promoters organized as a voluntary trust instead of a corporation rather than run the gauntlet of the blue sky commissions and examiners. A member of the stock-selling fraternity whose operations had resulted in the sale of $2,000,000 par value of various stocks to the western public, comprising ten companies of which only one had as yet paid a dividend—2 per cent—told me that his business had been seriously interfered with by the necessity for obtaining approval of the various issues which he handled. A point especially stressed by this man against the act was the limitation of commissions to salesmen—in Michigan, for example, to 15 per cent, a restriction very difficult to evade. The Michigan Blue Sky Commission forbade the sale in that state, of the securities of Hugo Stinnes, Inc., in 1926. The securities commissioners stated

that the plan of the underwriters called for a bonus of 500,000 shares which they proposed to sell for $10,000,000, while the amount of notes purchased by the underwriters was only $25,000,000.

Little importance attaches to the objection that blue sky laws interfere with the development of legitimate, though speculative, enterprises. It is a safe conclusion that no banking commissioner will interfere with the right of a group of speculators or investors to join forces and funds for the development of a new enterprise. What the administration of the law does prevent, or, at any rate, interfere with, is experimentation with other people's money, and the waste of the funds contributed. Henry Ford has often been cited as a development which would have been interfered with by a blue sky commission. On the contrary, the Ford Motor Company was a private promotion. No salesmen were employed. The capital was contributed by a group of friends and associates, and at that only $100,000 of money and property was provided. The origin of the Bell Telephone enterprise and the Westinghouse Companies was similar. Legitimate business enterprises, no matter how hazardous, where men risk their own money in the pursuit of ends which seem to them profitable, have nothing to fear from public regulation.[2] When, however, it is attempted to raise funds for new and untried schemes from the public by making extravagant promises of profits, and when a large amount, sometimes 50 per cent of the money received, is retained by the sales organization, the blue sky official may, and often does, properly and vigorously interfere.[3]

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[2] The Pennsylvania Securities Act, as originally drawn, allowed companies selling their own securities who paid no commission to salesmen to operate without the approval of the commission. This section has been amended so as to require the approval of all non-exempt securities.

[3] An injunction was issued restraining Pyramid Pictures, Inc., Smallwood, Inc., and A. N. Smallwood, as an individual, from dis-

Federal Control of Fraudulent Promotions

Another feature connected with illegitimate promotion is the system adopted by the United States for preventing and punishing improper, fraudulent, and criminal promotion. The Federal Government is able to attack fraudulent stock-selling schemes because in almost every instance where promotion is wrongfully pursued on a large scale the mails are misused by the promoters.

Criminal operations of this kind are covered by an act of Congress passed March 4, 1909, which is recited at length in Section 1707 of the Postal Laws and Regulations of the United States of America, edition of 1913. This act makes it a crime for one who has devised, or intended to devise, any scheme or artifice to defraud or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises to place, or cause to be placed, for the purpose of executing such scheme or artifice, any letter or other kind of mail matter, in any post office of the United States. The punishment therefor is a fine of not more than $1,000, or imprisonment for not more than five years, or both.

Very efficient machinery is provided for the enforcement of the law above mentioned. A corps of officials, known as the United States postal inspectors, is charged with the duty of investigating and assisting in the prosecution of infractions of the postal laws. The country is subdivided into nine districts for purposes of enforcing the law, each district being in charge of a deputy chief inspector, while each deputy has a force of inspectors directly under him. Each inspector must report daily to the deputy chief inspector, who is his immediate superior, and in this way the

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posing of $2,000,000 par value of bonds of Pyramid Pictures, Inc. This action was taken by the Attorney-General's office under the Blue Sky Law, the allegation being made that the defendants had not sufficient funds to back the securities. The only visible assets were claimed to be worth $53,000.

department is kept in touch with the work of all of its subordinates.

When a complaint comes to the postal department that an investor has been defrauded in a stock or bond purchase, the investor is asked to furnish evidence of the fraud. If he satisfies the deputy inspector that he has grounds for his complaint, one or more inspectors are appointed to investigate the matter, and, at the same time, the chief inspector at Washington is notified that a new complaint is pending. If, after a careful investigation, the department believes that the complaint is well founded, that the mails have been misused, and that a crime has been committed, the evidence collected by the department is submitted to the United States District Attorney, and, at the same time, the evidence is forwarded to Washington with the request that a "fraud order" be issued against the accused promoter.

The "fraud order" is one of the most effective means of protecting the public from the speculative promoter. Until it is rescinded, it prevents the accused from receiving mail of any kind, and this protects the public. In justice to the post office department, there have been few cases in the history of the department where accusations of this kind, when seriously made, have not been sustained by the action of the courts. The principal objection to this method of prevention is that it comes into operation only after the securities have been sold, since it is only at that point that the "sucker" becomes alarmed to the point of complaint.

In order to coördinate the work of the Federal and state governments in their efforts to protect the public against doubtful securities, a bill introduced and passed by the House of Representatives in 1922, and still before Congress, provides that "the selling of any security, or offer to sell such security, from any state to any other state, in which such security cannot be lawfully sold under local

law, is prohibited." Certain exceptions are made; for example, issues dealt in upon recognized stock exchanges, and securities issued by bodies under government supervision. The United States Department of Justice is responsible for the enforcement of the act.[4]

The passage of this act which has been generally endorsed will make it difficult and dangerous to carry on interstate commerce in unapproved securities, and will supplement the action of the state authorities by the power of the Federal Government. The crooked security dealer may take his chance with the blue sky state authorities, but he fears the Federal Government. The Department of Justice will reach for him and seize him, wherever on the face of the globe he may take refuge. Its patience in pursuit is inexhaustible. It will try him ten times, if this is made necessary by hung juries, and the sentences of the Federal judges are very heavy.

[4] See Ashby, *Illinois Law Review*, February, 1928.

CHAPTER XXII

CORPORATION PROFITS

Problems of Financial Administration

Our corporation is now organized and financed, launched as a going concern. Immediately a series of important problems engage the attention of the management. Without the business man, the manager, the industrial machine would not run. In an amusing little play, entitled "Gibson's Upright," Booth Tarkington narrates the downfall of a piano business whose owner, at the end of his patience, wearied by incessant controversies with his employees over wages and working conditions, makes them a present of the business and retires to await developments. At the end of a year, the concern is practically dead, wrecked by ignorance and stupidity, and he is unanimously invited to resume control. The problems of successful business management are numerous and difficult—organization, personnel, purchasing and planning, advertising and selling, competition and finance.

This study is not concerned with business management so-called, but with the methods of financial administration so far as these have been standardized in the practice of representative and successful concerns. The subjects to be considered under this head are: (1) the determination of profits; (2) the financing of maintenance and depreciation; (3) the management of working capital; (4) the distribution of earnings to stockholders. In the remaining chapters of this volume we take up these matters in the order given.

Importance of Accurate Determination of Profits

The corporation income tax makes it necessary for every business, no matter under what form it may be conducted, to determine its profits. Failure to make proper returns subjects the delinquent to severe penalties. Of special importance, however, to the corporation, from the standpoint of financial management, is the accurate determination of profits. The partnership, or the private corporation whose owners are in close touch with its affairs, may tolerate a degree of laxity in the determination of profits. If profits are overestimated and the business is too rapidly expanded, it may be possible, by economizing and contracting the scale of operations, to regain a firm position. Private corporations and partnerships, moreover, grow out of earnings. They do not appeal to the body of investors, as the public corporation is forced to, for funds with which to enlarge their business. Their stocks and bonds are not dealt in on the public exchanges.

The stocks and bonds of public corporations which appeal to the investor to provide them capital, are widely held by institutions and individuals who draw income from these securities. This interest should be regularly paid, and dividends should be distributed without serious and sudden changes in their rates. These regular payments can only be counted on if the fund out of which they are to be made is exactly determined. The securities of public corporations, moreover, are usually listed on the exchanges, and are bought and sold every day. A free market for their securities is of great importance to corporations. They are enabled by this means to obtain, from time to time, additional sums of money for the enlargement of their business. A primary essential to a free market is accurate information concerning the financial status of the companies issuing these securities. Corporation stocks and bonds are deposited in enormous amounts with banks and

trust companies as collateral for loans, and the bank cannot lend intelligently unless it is placed in the possession of all essential information concerning the affairs of the enterprise.

Publicity of Corporation Returns

It is not only necessary that their profits should be accurately determined by public corporations, but it is equally essential that they should be stated in simple and intelligible form, so that the investor and the banker can, without difficulty, reach an accurate conclusion as to their earning power and financial condition. For a long time American railway companies did not recognize the necessity for making such statements of assets and earnings, and their stocks were the objects of speculation which always thrives upon uncertainty. This condition has long since passed away. The reports of our railroad companies, even before the law compelled them to make an accurate determination of their profits and a full statement of their financial condition, leave little to be desired. The industrial corporations are more remiss in making statements of their condition. Until the United States Steel Corporation set the example by publishing what is, probably, the most satisfactory report of any of the large industrials, officials of these corporations generally refused to give information on the ground that disclosure of the condition of their business would give an advantage to their competitors. In time, however, this aversion to revealing the condition of their affairs was worn away by the necessity for obtaining a broad market for their securities, which could not be had without some information upon which the investor could base his judgment. The reports of industrial corporations are still, as a class, far from being as complete as the reports of the railroads. Street railway and public service corporations generally give even more meager information than do the industrials. Steady

improvement in the direction of publicity is, however, everywhere evident. Even if the laws do not intervene to compel full statements of income and expenditures, assets and liabilities, the force of financial opinion may be relied upon to accomplish this result.

The listing requirements of the New York Stock Exchange, for example, are particularly full and detailed. They are open to public inspection, and give a complete and accurate picture of the accounts of fourteen hundred of the largest and most important corporations in the United States, together with a large number of foreign companies.

It is not necessary, as corporation officials have feared, that the amount of information which is necessary to acquaint the investor with the financial condition of the property in which he is interested, should involve the disclosure of the secrets of the business. This may be illustrated by an instance related by a public accountant, which shows the possibility of harmonizing publicity for the investor with secrecy as to essential details with which the investor had no legitimate concern. The accountant was engaged to make a report on a newspaper property which was about to be sold by order of the court. The report was especially full and detailed, but not sufficiently explicit to suit certain persons, who requested information as to the returns from advertising and the amount paid for salaries. The master in chancery refused to allow this information to be given on the ground that the competitors would discover the secrets of the business. The accountant pointed out, however, that by presenting merely the totals, without mentioning individual items, this danger could be avoided, and at the same time, the investor could be fully informed. The competitors of this paper could not have profited from information as to the aggregate salaries paid, or the total amount of advertising receipts. What they were concerned to discover was the amount paid to

certain individuals on the staff, and the terms of particular advertising contracts. This information, however, would have been of no assistance to the investor, and could easily have been dispensed with.

Definition of Corporation Profits

Recognizing the necessity, from the standpoint of the public corporation, that its profits should be exactly ascertained, and that clear and intelligible statements of its condition should be made, we proceed to consider the methods by which the determination of profits is accomplished. The profits of a corporation may be defined as the increase in the net worth of a corporation over a given period. The net or present worth of a business consists of the difference between assets and liabilities. In a manufacturing concern, the statement of assets and liabilities of a given year might be as follows, on January 1st:

Assets		*Liabilities*	
Plant	$1,000,000	Capital stock	$ 100,000
Accounts receivable	500,000	Bonds secured by mortgage	500,000
Materials and supplies	300,000	Pay rolls, vouchers, etc.	200,000
Cash	250,000	Surplus	1,250,000
Total	$2,050,000	Total	$2,050,000

On December 31st of the same year, if the business had been prosperously conducted, and no withdrawals had been made, the statement of assets and liabilities might be as follows:

Assets		*Liabilities*	
Plant	$1,250,000	Capital stock	$ 100,000
Accounts receivable	600,000	Bonds	500,000
Materials and supplies	400,000	Pay rolls, vouchers, etc.	350,000
Cash	350,000	Net present worth	1,650,000
Total	$2,600,000	Total	$2,600,000

The result of this comparison would show in the following table of differences:

Net present worth, January 1st	$1,250,000
Net present worth, December 31st ...	1,650,000
INCREASE	$ 400,000

It appears that the net present worth, the difference between assets and liabilities, usually called the surplus, has increased $400,000 during the year. The company has succeeded in increasing its assets over the increase in its liabilities by this amount. During the year, however, various payments will have usually been made on account of interest and dividends. The amount of these payments must be added to the increase in surplus in order to ascertain the profits of the year.

Conventional Form of Stating Profits

The profits of a business are expressed in the following form which is used by a large manufacturing company to express the results of its business.

Total sales	$72,541,771
Manufacturing and distributing cost	59,615,222
Net earnings from operation	12,926,549
Miscellaneous income	524,598
Total income	13,451,147
Administrative and general expenses	520,769
Net income	$12,930,378
Charges	
Total deductions	4,044,695
Net profits	8,885,683
Dividends	4,200,000
Undivided profits	$ 4,685,683
Previous surplus	12,006,306
Total surplus	$16,691,989

This form, with unimportant modifications, is used by every corporation which makes any report of its condition.

We start with gross earnings, the product of sales or commodities, services or contracts, according as the business is a manufacturing or jobbing company or a bank or insurance company. From these gross earnings of $72,541,771 are deducted the cost of running the business, maintaining the plant, and selling the product, which was $59,615,222. The difference between the receipts and the payments represents the net earnings from operation, in the above statement, $12,926,549. To this amount must be added items grouped under the head of "other income." For the company in question, this "other income" was comparatively small, only $524,598, leaving the total income at $13,451,147. This company next deducts administrative and general expenses before arriving at the balance of net income. It is a common practice to include administrative and general expenses with operating expenses. Making this last deduction, we arrive at the total net income of $12,930,378. This represents the combined earnings and income of the business during the calendar year.

Claimants to Corporation Profits

Various claimants now appear to this income. First comes the state, which receives taxes; then the creditor with his demand for interest and sinking funds; then the corporation demanding that its plant shall be fully maintained, and that provision shall be made against the day when it is worn out; also asking money for insurance and losses incident to the conduct of the business. There is also the claim of the owner of property which the corporation holds under lease, known as rentals. These deductions, added together, made the "total deductions" before the owners can draw anything from the business, $4,044,695. Deducting this amount from the net income, there was a balance available for distribution to stockholders of $8,885,683. This company had $120,000,000 of capital stock equally divided between preferred and common stock.

The preferred stock paid 7 per cent dividends, and the dividend was cumulative. It is necessary, if the profits permit, that dividends on the preferred stock should be paid. Seven per cent on $60,000,000 of preferred stock calls for a distribution of $4,200,000, leaving $4,685,683 for the common stock. At the date of this report, however, the business needed money for its development; it was not deemed wise to pay any common stock dividend, and the undivided profits, amounting to $4,685,683, were retained in the business. This amount was now transferred from the income account to the surplus account, increasing the excess of assets over liabilities from $12,006,306 to $16,691,989.

This addition to the surplus was accomplished by an increase in certain assets of the company, and a decrease in certain liabilities which appear in the following table:

Assets	*1908*	*1907*
Property account	$ 63,680,776	$ 62,844,136
Deferred charges to operations	189,683	285,288
Insurance fund assets	400,832	.....
Finished products, raw material, etc.	33,854,933	35,140,416
Material, purchased for current season	13,832,123	15,147,210
Farmers' and agents' notes	25,471,132	26,583,001
Accounts receivable less contingent reserve	10,840,098	12,708,509
Cash	9,339,055	3,573,894
TOTAL	$157,608,632	$156,282,454
Liabilities		
Preferred stock	$ 60,000,000	$ 60,000,000
Common stock	60,000,000	60,000,000
Purchase money obligations	.....	3,450,195
Bills payable	8,286,664	10,465,775
Audited vouchers, accrued interest, taxes, etc.	4,729,387	4,543,443
Preferred dividend payable	1,050,000	1,050,000
Reserves	6,850,540	4,766,734
Surplus	16,692,041	12,006,307
TOTAL	$157,608,632	$156,282,454

The balance sheet surplus represents the accumulations of undistributed profits over a series of years. It may, in turn, be distributed by a readjustment of the capitalization according to methods which will be discussed in a later chapter.

Sources of Corporation Profits

Having now defined the surplus of a corporation, we have next to examine the sources from which these profits are derived. We find these to be as follows:

1. Income arising directly from the company's business.
2. Premiums on the sale of stocks and bonds of the company.
3. Profits arising from the sale of other assets of the company no longer needed for its business.
4. Profits arising from a revaluation of the company's property.

We have now to consider these sources of profits from the standpoint of an accurate determination of their several accounts. Gross earnings represent the receipts from the sale of services, contracts, or commodities. These receipts are in the form either of cash or of promises to pay cash. In ascertaining their amount, it is necessary to exclude all items such as rebates to customers and cash discounts. When the business is carried on among several departments or subcompanies, all sales between departments or subsidiary companies should also be excluded. It is also necessary to exclude all bad or doubtful debts and accounts.

CHAPTER XXIII

THE DETERMINATION OF PROFITS

Deductions from Corporate Income

After ascertaining the total income of the company, consisting of net earnings from operation, plus other income, certain deductions must be made, known as fixed charges, which include taxes, interest, and rental. The only question which may arise concerning these payments is the treatment of interest paid on bonds during the construction period. It is customary to include this in the construction cost, issuing enough securities not only to provide for the cost of the plant, but to pay interest on the bonds while the plant is building. As long as no secret is made of the matter, and it is well understood, there can be no reasonable objection to the practice. If this was not done, all that could be required is for the stockholders to advance the money necessary to pay interest on bonds during the construction period, for which they would receive the obligations of the company. The effect upon the amount of debt would be the same.

The final item of charges consists of such miscellaneous items as commissions on sales of securities and other expenses which are chargeable against income, but which cannot properly be classified either as operating expenses or as fixed charges. Such expenditures should be charged to operating expense rather than to fixed charges. The balance remaining after these charges is the surplus earned for the stock during the year, out of which dividends may be paid.

Another source of surplus consists of profits from

premiums on the sales of securities issued by the company. Discounts on all sales of securities are to be considered as losses, and charged against the income of the year. For the same reason, premiums received are to be regarded as profit, although not as profits which can be safely distributed to stockholders.

Income from Other Sources

The next item in the income account is income from other sources. This is made up as follows:

1. Interest received on bonds of other companies.
2. Dividends on stocks of other companies.
3. Rentals of property owned by the company and leased to outsiders.
4. Interest on the company's bank deposits, or on any loans in which it may invest its cash balance.

These receipts are usually incidental to the main operations of the company. Business corporations are not primarily investment companies. They are organized to transact a railroad or manufacturing or trading business; and, although they may acquire securities in the course of their regular business, these securities are usually acquired for other purposes than to obtain revenue. A railroad corporation, for example, may purchase an interest in the stock of another company with which it exchanges a large amount of traffic, and may receive a dividend on this stock. The principal advantage of the purchase is not, however, to receive the dividend, but to obtain a favorable traffic agreement. Funds, accumulated for various contingencies may, however, be invested in good securities instead of being buried in the business.

Again, railroad companies may build new mileage through subsidiary companies to which they advance money, taking the bonds and stocks of the subsidiary companies as payment and holding these in their treasury. In

this case, instead of treating the operations of all the companies under their control as a unit, we have the distinction between lines directly operated and lines controlled. In reality, however, the returns on the stocks and bonds of the subsidiary, while in the treasury of the parent company, represent merely a part of the operating income of the consolidated company.

The item of interest on bank deposits figures largely in the accounts of profitable corporations during periods when they are not expanding their operations, especially when their receipts are evenly distributed throughout the year, and their dividend and interest payments are made on fixed dates. Under these circumstances, there is necessarily a considerable accumulation of money to the credit of the company, and this money they may either leave or deposit, receiving the bank rate of interest, or they may lend it out at a higher return than the banks will pay.

Profits and Losses Arising from Premiums and Discounts on Securities Sold

Profits from premiums on securities sold are different from profits or losses derived from income account. When securities of a company are sold at a premium, the practice is to show in the balance sheet as a capital liability only the par value of the security sold, and to credit to surplus the premium received above the par value. Profits derived from the sale of capital obligations should be reserved as capital, unless the company is dissolved, and should be separately stated, else dividends may be paid while money is being lost in operation. When bonds are sold at a discount, a loss results. The company has promised to pay back a larger sum than it has received. This loss, if small, can be charged against the profits of the year. If the year's loss is too large to warrant such a write-off, it can be carried as a deficit item and written off year by year for an extended period. Generally speaking, the practice of

investing these premiums in productive assets is, however, so well established that the danger of basing dividends upon them is remote. A similar disposition is usually made of profits received from the sale of unpledged treasury assets, usually consisting of securities, at prices above their cost. Unless the proceeds of such sales are distributed to stockholders as a special dividend, the practice is to invest the entire proceeds in improvements, adding the amount of the profits to some liability account. Such a disposition was made by the Pennsylvania Railroad of the proceeds of its stock holdings in the Chesapeake & Ohio, Norfolk & Western, and Baltimore & Ohio, following the passage of the Hepburn Law in 1906, which made the holding by one road of dominating interests in its competitors unlawful. A large profit was shown, but the proceeds were invested in the property, and both assets and liabilities were increased by the amount of profits realized.

Discounts on securities sold are treated as losses. If small in amount, they are charged against the income of the year. Discounts on bonds or stock sold for original construction are usually included in the cost of construction. In calculating income for taxation, the deduction of discounts is not allowed.

Revaluation of Assets

The third source of surplus is "profits from the sale of assets." Profits arising from the revaluation of assets are doubtful. When the property of a business has been subjected to some unusual damage, for example the discovery of new and richer deposits of iron ore which will reduce the valuation to be placed upon a company's iron ore deposits, it is frequently necessary to write down the book value of assets in the form of a loss on the single year's operation, or, if the depreciation is excessive, to spread this loss over a series of years.

On the other hand, it has been urged that the "writing

up" of assets where property has appreciated in value is equally legitimate. This can be admitted only within narrow limits. "Writing up" the value of assets is entirely proper in the case of securities owned where the market value can be ascertained, and where the increased income corresponds to the increased price. Beyond this, however, the "writing up" of assets is of doubtful propriety. It is safer to maintain a book value of assets, based upon cost, if less than market value, and to leave the surplus account undisturbed by any additions based on increases in their market values. For example, a company may have operated a factory situated in a large city where land values were appreciating. In time, the growth of the company's operations makes a country location desirable. The city real estate then comes up to be sold, and it is found that its value has greatly increased over its cost. This increase in value is to be taken as profit, but since the profit was not earned during a single year, but represented the appreciation in value over thirty years, it will be improper to count this in the surplus available for distribution to stockholders except as a special dividend. It will be treated in the same manner as profits from premiums on the sale of securities. In cases, however, where the company purchases and sells property in the same year and shows a profit, this profit may be included in the annual profits of the company upon which the distribution of profits is to be based. The value of the real estate of the Baldwin Locomotive Works in Philadelphia, now abandoned for manufacturing purposes, has been estimated at $30,000,000.

The danger of thus appreciating assets may be seen by an illustration. The property on which the Broad Street Terminal of the Pennsylvania Railroad in Philadelphia stands has increased several hundred per cent since purchase. If this piece of real estate were to be revalued, its original cost to the company would be many times multi-

plied. Broad Street Station is, however, not to be sold. It will for many years continue to be used for the purposes of the company. The contribution of this terminal location to the profits of the Pennsylvania Railroad, however, has not increased as rapidly as its value as real estate. At the same time, it is impossible to ascertain how much is this increase in the contribution of Broad Street Station to the net profits of the Pennsylvania. The only basis on which its value could be written up on the books of the company would be by comparing it with the value of real estate in the vicinity. This would result in an exaggeration of its value as a piece of revenue-producing property. The New York, New Haven & Hartford has a three-fourths interest in the South Station, Boston, which cost $15,000,000 to build. The loss on the operation of this station, however, which is maintained largely for public convenience, has been as high as $500,000 in a single year. As a piece of real estate, this property is very valuable. As a piece of railroad property, however, it is a source of loss.

A practical reason for increasing the value of railroad terminal property is to make this increased value the basis for an issue of terminal bonds. In such a case, however, the lenders will make their own estimates as to the value of the real estate in question as security for the loan asked, and the corporation need not adopt the expedient of writing up the value of the property on its books. All things considered, the method of carrying the property of the company at its original cost and maintaining that cost intact by proper allowances for depreciation is best.

Classification of Operating Expenses

Operating expenses are divided into two general classes: those incurred in operating the plant; and expenses incurred in keeping the plant in good condition. A railroad company divides its operating expenses into five classes,

namely, (1) maintenance of way and structures; (2) maintenance of equipment; (3) conducting transportation; (4) traffic; and (5) general expenses. The nature of these expenses may be understood from the items under each classification. The largest items under maintenance of way and structure are track maintenance, road cleaning and ballasting, rails, ties, buildings and grounds, and track material. Under maintenance of equipment, the largest items are repairs of locomotives, repairs of passenger and freight cars, and repairs of tools and machinery. Under conducting transportation, we find the following principal items: station service; road men; road enginemen and firemen; fuel for locomotives; engine house men; trainmen; telephone and telegraph. The general expenses and the traffic expenses consist mainly of salaries paid to employees and officials.

Distinction between Cost of Operation and Maintenance

We have here illustrated the essential distinction between the cost of running the property and the cost of maintaining it. All those expenses involved in obtaining freight and passengers, in receiving and caring for them, in transporting them in safety to their destinations, are classed under the head of traffic and conducting transportation. Those expenses, on the other hand, which aim to keep the plant of the railway, its track, bridges, stations, cars, locomotives, round houses, repair shops, in efficient working order, are classed under maintenance expenses, and, for purposes of convenience in railway accounting, are divided into maintenance of way and structure, and maintenance of equipment.

The cost of operation—in the railway field, the cost of conducting transportation—need not further concern us. Its principles vary with every industry, and have no special significance for the subject of finance. The cost of maintenance, however, is a division of operating expenses

in which rules and principles have been developed of general application, and of peculiar importance in interpreting financial operations.

Standards of Maintenance

The maintenance of physical property involves the following: (1) the establishment of certain standards of physical condition which may be either printed in books of rules or may exist only in the minds of foremen and superintendents; (2) the expenditure of money on labor, appliances, and materials, in order to keep the property in a condition corresponding to this standard. A standard, for example, for a railway track is a description of the track and roadway as it ought to be, in other words, an ideal which the maintenance of way department is constantly striving to attain, but which, while they may never fall far below, they never quite reach. Some typical specifications are as follows:

1. *Roadbed.* The surface of the roadbed should be graded to a regular and uniform subgrade, sloping gradually from the center toward the ditches.

2. *Ballast.* There shall be a uniform depth of six (6) to twelve (12) inches of well-broken stone, or gravel, cleaned from dust, by passing over a screen of one-quarter-inch mesh, spread over the roadbed, and surfaced to a true grade, upon which the ties are to be laid. After the ties and rails have been properly laid and surfaced, the ballast must be filled up as shown on standard plan; and also between the main tracks and sidings where stone ballast is used. All stone ballast to be of uniform size; the stone used must be of an approved quality, broken uniformly, not larger than a cube that will pass through a two-inch ring. On embankments that are not well settled, the surface of the roadbed shall be brought up with cinder, gravel, or some other suitable material.

3. *Cross-ties.* The ties are to be regularly placed upon the ballast. They must be properly and evenly placed, with ten (10) inches between the edges of bearing surfaces at points, with intermediate ties evenly spaced; and the ends on the outside on double track, and on the right-hand side going north or west

on single track, lined up parallel with the rails. The ties must not be notched under any circumstances; but should they be twisted, they must be made true with the adz, that the rails may have an even bearing over the whole breadth of the tie. For all tracks on main line and branch roads, the rules governing the use of cross-ties shall be as follows:

a. First-class cross-ties shall be used in tracks where passenger and freight trains run at full speed.

b. For tracks where the trains run at low speed, new second-class ties shall be used. For all tracks in yards, or temporary tracks laid for construction purposes or otherwise, second-class and cull ties, or good second-hand ties taken out of a main track shall be used.

Similar standard specifications exist for every part of the railroad's property.

It is the duty of the maintenance departments to see that the property is always kept in this condition. A variety of agencies is constantly at work to lower these standards. The pounding of heavy trains throws the track out of alignment, grinds the ballast to powder, wears the rails, especially on the curves, and loosens the spikes and fish plates. And while the locomotives and cars are destroying the track they are destroying themselves. Wheels become worn, frames loose, paint wears off, glass is broken, boiler tubes are filled with scale, furniture and fittings become dirty and dingy.

While the running of the trains is doing all this damage, the agencies of nature are at work upon the roadway. Rain, sun, frost, and running water are constantly wearing it away. Water seeps into the ties around the spikes, carrying in bacteria and fungi, and in time the wood decays. In the spring, when the ground thaws, the track is lifted and wrenched out of line and surface. Erosion is constantly filling up the ditches and damming up water which settles around the ballast and helps on the disintegration of the roadbed. The ballast, from its own weight and that of the track and trains, settles into

the ground. Sunshine, wind, and rain unite to destroy paint and timbers. Frost makes rails and fastenings brittle. All these agencies of destruction are constantly at work to pull down the road below its established standard, and the maintenance of way department is always at work building it up again. In all weather, at all hours, the maintenance gangs are at work upon the property. The task is never done. They never approach its completion. The standard is never reached. All they can do is to keep it in sight. Perfection is unattainable.

Maintenance of equipment is handled in a somewhat different manner from maintenance of way and structure. The basis of equipment maintenance is mileage. An elevated railway car, for example, may be assumed to run 6,500 miles before it needs attention. When that mileage is reached, the car is put in the shop for repairs. Or an inspection system may locate bad order cars, or each part of the car may have a predetermined mileage, at the end of which, it goes into the shop to be overhauled. Here, in the largest industry, that of transportation, is shown the problem which confronts every business, that of maintaining a physical standard. Every man has the same problem. His personal appearance, his physical fitness, lie at the foundation of his earning power. Let him neglect his diet, his exercise, his personal appearance, let his moral standards deteriorate, and almost immediately his efficiency as a productive agent declines. So, in the field of production, incessant care, unwearying vigilance is necessary if the standard, the ideal, is to be maintained.

A few additional illustrations will serve. A flour milling company submits the following: Each miller carries a small notebook and during his half-hourly inspection of the plant makes a note of everything that needs attention. These memoranda are then transferred to a maintenance record and left on the head miller's desk. Every Sunday morning three of the men go over the record. If

a bearing shows signs of working loose or a sieve in one of the sifters shows wear, it is noted on the record and repaired. The first miller attends to all the belting, testing the belts periodically and tightening them when necessary. A millwright is employed for part time to repair spouts and elevators. Once a week all the sifters are inspected, brushed, and the silks are repaired. At regular intervals the rolls are changed, and the worn rolls are shipped away for recorrugating. Breakdowns, as a result of incessant care and watchfulness, are of rare occurrence.

Another illustration is furnished by a florist. In a greenhouse an especially important item is the painting of the sash, and the replacement of sash putty. Where putty falls out, water penetrates between the sash and the glass, freezes in severe weather, and breaks the glass. Neglect of painting also rots the sash and a heavy snow will break glass with resulting freezing damage. The heating plant needs careful attention during the summer. All steam pipes which run under the benches must be sandpapered and painted, since otherwise with the constant drip from the benches the pipes soon rust. Boilers are cleaned and steam pipes re-covered annually. All broken glass is replaced as soon as possible.

When improper maintenance endangers human life, the state steps in, as in steam boiler inspection, and it insists on safety appliances, and enforces rules. In the coal-mining industry, an extra hazardous business, maintenance standards are prescribed by law. In Pennsylvania coal mines, for example, "on all haulage roads, the track, roadbed, and required clearance shall be kept clean and free from obstructions, such as lumps of coal, slate, lumber, rails or other material over which men may stumble." "The track shall be properly aligned, and shall be free from high or low joints, broken rails, defective switches, defective frogs and frog joint alignments. Roadbeds shall be kept well drained and properly sur-

faced." In every industry progressive management is standardizing maintenance.

This matter of adequate maintenance is of increasing importance with the growing substitution of machinery for hand labor. A large modern works is a complicated machine, not merely a building housing a large number of laborers. Neglected scale in the boiler tubes may cause a leak and shut down the plant. A broken engine governor may stop a coal elevator and so close a factory. Some years ago, a broken shaft in a large power house, for which no spare part was available, closed a number of coal mines for several days. Even so small a matter as neglect to replace worn-out packing in mine pumps may cost five hundred men a day's pay and make a large reduction in tonnage. Paint, repair, replacement, abundance of spare parts, incessant vigilance, are necessary to keep a plant in serviceable condition.

Distinction between Maintenance and Betterments

Maintenance includes a second division called betterments. This is sometimes classed with additions, but, since it relates to plant standards, the subject is considered in connection with maintenance. We have explained what a standard of maintenance is, and a betterment expense is one which raises that standard. Examples of betterment expenditures from the railway industry, the most familiar and accessible source of information, are the substitution of stone for gravel ballast, of masonry embankments or steel bridges for wooden trestles, replacing light rail with heavy rail, lining tunnels with brick or concrete, creosoting ties, elevating tracks, and like improvements.

The size of the plant has not been increased by betterments. It is no larger than before. It has, however, been improved and is more efficient. Stone ballast drains better and gives a firmer support to the track. Heavier trains can be run over a stone-ballasted track at higher speed. Such a

betterment not only reduces operating expenses, but increases gross earnings. Other familiar illustrations of betterments are the substitution of heavy structures and machinery for lighter apparatus.

The writer is familiar with the coal-dredging industry of eastern Pennsylvania. This industry extracts anthracite coal from creeks and rivers in which waste coal is continually being deposited by mines and washeries. The water in these streams is highly charged with sulphuric acid. Steel or iron screens over which the coal is passed to separate it from sand and other impurities rapidly disintegrate under the action of the acid. By substituting copper and bronze as screen material, the life of the screens was lengthened from one month to twelve months, showing a large saving. Many anthracite coal washeries are built of steel and concrete, and are practically indestructible compared with the wooden structures which they replace. These illustrations show the nature of a betterment—it is an improvement in a machine or structure which, while leaving the form and function substantially unchanged, by a substitution of material, or an increase in size, lengthens life, increases efficiency, and reduces the cost of repair.

CHAPTER XXIV

MANAGEMENT OF MAINTENANCE APPROPRIATIONS

We now approach the financing of maintenance, in other words, the management of maintenance and betterment appropriations.

Relation of Maintenance to Volume of Business

A large part of the expense of operation varies with the volume of business done. An increase in the traffic of a railroad means more trains, more employees to run the trains and to keep them in repair. A falling off in traffic shows a corresponding reduction in the cost of conducting transportation. The same is true of all industries. The cost of operating the plant, as distinct from the cost of maintaining it, fluctuates with the amount of business done. There are, of course, certain fixed expenses connected with operation and selling which cannot be adjusted to changes in business, and which result in increased cost when earnings are reduced. Broadly speaking, however, the cost of running the plant, of manufacturing the goods, or transporting the freight and passengers, changes with the volume of business transacted.

In the maintenance items of operating expenses, however, a certain amount of variation is possible to adjust outgo to fluctuations in income. Maintenance charges, as we have seen, contain two items: the cost of upkeep and repairs, and the cost of betterments calculated to raise the standard of construction and decrease the cost of maintenance or operation, or increase the capacity of the plant. The rule which governs the management of the

first class of maintenance expenses is that, so far as possible, without damaging the credit of the company, standards of maintenance, once established, should be rigidly adhered to. Maintenance, in other words, should be a comparatively fixed expense, varying only as the influences which affect the wear and destruction of the property are modified.

Rigid adherence to this rule admits of a considerable amount of fluctuation in the amounts of annual appropriations for upkeep. The cost of railway maintenance of way, for example, is increased by an open winter which results in greater damage to the track and roadway by alternate thawing and freezing. It is increased by the high cost of labor and material incident to business prosperity, and also by the heavy traffic which results from large production in prosperous times. Maintenance cost, on the other hand, is reduced, without injury to the property, during periods of depression. When traffic is light, the wear upon the track and the amount paid out in wages are lessened. The efficiency of labor is also increased at such a time, not merely because workmen are more anxious, by diligence and industry, to commend themselves to their employers and so retain their positions, but also because track work is not so much interfered with by passing trains. The cost of materials is also lower during periods of depression.

The maintenance of plant or equipment not directly affected by weather conditions can also be reduced during a period of depression without injury to the property. A large amount of substitution of parts, such as air-brake hose, belting, etc., can be made during a dull season, when only a portion of the plant or equipment is in operation, thus reducing the cost of maintenance. A case in point is a factory manufacturing leather goods which had normally four floors in operation. In a dull year business fell off so that only the machinery on the one floor was

used. As fast as the belting wore out on the lower floor, belts were transferred from idle machines, where they would deteriorate, and put into use. Such economies of maintenance do not involve any lowering of the standard of the plant, although the cost of replacement may be greatly increased to restore the equipment used up in this manner when the entire plant again comes into operation. Railway companies during periods of reduced traffic usually curtail their equipment maintenance without serious damage to the property. During 1927, for example, the anthracite industry was severely depressed and shipments declined. All the anthracite carriers reduced their equipment maintenance; cars were stored on sidings; locomotives were coated with grease and allowed to stand idle. Shop forces were reduced and expenditures for repair materials, for example, air-brake hose and brake shoes, fell off.

The Stitch-in-Time Rule of Maintenance

With this exception noted, however, the rule followed in maintaining a plant is that "a stitch in time saves nine." The expense of regular and systematic maintenance is much less than where a long-neglected plant is completely overhauled and repaired. A familiar example is the recognized economy of regular painting.

Neglect of maintenance, for any reason, is likely to be followed by the most serious consequences. The operating efficiency of a plant is so closely related to its physical condition, and the success of its business is so dependent upon its efficiency of operation, that serious damage may be inflicted upon a company by failure to maintain its physical standards.

A good illustration of the consequences of neglecting maintenance is furnished by the fifth annual report of the Kansas City Southern Railway Company, for the fiscal year ending June 30, 1905. The capital stock of this company was originally vested in a voting trust for five

years from April 1, 1900. The voting trust expired by limitation on April 1, 1905, when the stockholders came into possession of their property and elected a new board of directors.

They found the road in such a condition as to be practically unfit to carry on the business of transportation; 25 per cent of the engines were in bad order, 65 per cent of the freight equipment was unfit for use in the transportation of grain, merchandise, and other freight demanding dry cars; 55 of the 65 per cent required heavy repairs; tie renewal had been neglected, ditches had not been cleaned, sufficient ballasting had not been done, and sufficient rails had not been laid. The condition of the ties and wooden structures and track, as a result of the neglect of maintenance, was so bad that it was impossible to move trains at ordinary speed. During the six months from January 7 to June 30, 1905, as a result of the impaired condition of the property, there were 715 wrecks and derailments reported,

> each of which was of sufficient magnitude to require a special report and therefore cause serious loss and delay. Such a great number of accidents could not fail to cause serious loss of the confidence and good will of the public, and consequent diversion of traffic, also destruction and damage to property, delay to trains, and resulting wasteful expense for extra fuel and overtime of employees.[1]

During the month of May, 1905, overtime paid engine and train crews amounted to $8,311.28, although the average of overtime for the three years preceding, before the property had reached its worst condition, was $5,990.88. In addition, large amounts were paid each month for labor in rerailing cars and engines, and for repairing track and equipment, as a result of derailment due to defective tracks. Large amounts were paid for loss and damage to

[1] Fifth annual report of the Kansas City Southern Railway Company, fiscal year ended June 30, 1905.

freight due to such derailments. Finally, the company suffered severely in competition for business because of its inability to take all the traffic which might have been obtained, and also because the traffic which it did move was often seriously delayed in delivery and arrived in bad condition.

We see, in the case of the Kansas City Southern, the effect of the neglect of maintenance upon operating efficiency, and the effect of decreased operating efficiency upon traffic and earnings. While this is an extreme case, it illustrates a principle which is of invariable application. To allow a property to run down is to impair the property's efficiency and to inflict serious injury upon the operating company.

Exceptions to the Stitch-in-Time Rule

It is the practice of many corporations, especially those which have not yet reached a position where they can show large surpluses over dividend requirements, to vary their appropriations for maintenance according to their earnings. They do not allow the property to deteriorate so far as to interfere with its efficiency, but they postpone all but the most necessary repairs until earnings have improved. Such a policy may be justified by financial necessity. When a reduction in the dividend of a company will impair the company's credit, or prevent the sale of bonds or stock, the skimping of maintenance cost may be pardoned. A board of directors is always reluctant to reduce the dividend rate. Such action inflicts damage upon the stockholders, and is certain to lead to criticisms. When companies are running on a narrow margin of earnings, when conditions of reduced earnings are encountered, their disposition is to save at the expense of the plant. It is going too far to say that such a policy is never justifiable. Each case must be determined on its merits, with reference to the peculiar circumstances in

which the directors of the company find themselves. It is, however, well established that the policy of so-called "concentration of maintenance expenses" into years of large earnings is costly, in that it results in a higher average of expenses over a series of years in keeping the plant in condition than would be necessary if repairs were regularly made.

Fallacy of Saving in Maintenance

It has been argued that in periods of large earnings, companies can raise the condition of their plants above standard, creating a reserve against which they can draw during a period of reduced earnings. If our analysis is correct, this argument is fallacious. A standard is an ideal, or a description of the property as it ought to be. A plant can fall below its standard. In fact, the standard, as long as it is a standard, being an ideal, is never reached. When the standard is raised, a new and higher standard is established, adherence to which is the test of good management. For example, when a railroad replaces gravel ballast with stone ballast, the operation of the railroad is soon adjusted to the new roadway, heavier equipment and longer trains are run at higher speed, and any lowering of the standard of track maintenance is quickly reflected in the operating efficiency. To take another illustration already used—the substitution of copper or bronze screens for steel or iron screens in screening anthracite coal—how can a "saving" be made by going back to the cheaper material when the copper screens wear out? The standard is at once lowered and the expense of screens per ton of material handled is increased.

Financing of Betterments

The financing of betterments is approached from a different standpoint. The preservation of a standard once established, is imperative. The standard can be lowered

only under stress of necessity. To raise the standard—that is another matter. Such expenditures properly wait upon the convenience of the revenue. A plant must advance and improve, or it will go backward. This is the law of industrial life. But the advance need not be continuous. Long periods of stagnation may intervene when betterments and capital additions are postponed, when the business conserves its energy, completes work already undertaken, and gathers strength for a new start. The rule to apply to the solution of such problems is the rule of common sense which does not permit the spending of money which is not in hand or in sight.

On the other hand, great executives like Harriman and Carnegie concentrate the betterment expenditures of their companies into periods of dull business, when materials are cheap, labor abundant, and betterment work can be done with the least disturbance to operation. Since it demands the accumulation of money during flush times for expenditure during dull seasons, this policy can be adopted only by companies of great financial strength and extremely conservative management. A general adoption of this policy would furnish an effective cure for periods of business depression. Indeed, it has often been recommended for this purpose by President Hoover, especially in reference to public works, as a means of reducing the fluctuations of industry and trade. President Hoover advocates a considered policy of building roads, public buildings, and other improvements when the general trade is dull, reducing unemployment and replacing some of the reduction in demand for commodities by the expenditure of public money. Its adoption on a large scale, however individually and socially desirable it might be, must be placed far in the future. Betterments as well as additions, for the public company, must continue to wait upon the convenience of the surplus revenues, taking the leavings from the stockholders' table.

Capitalization of Betterment Expenses

Our final inquiry concerns the capitalization of betterment expenditures. By capitalizing an expenditure is meant charging, that is to say, adding its amount to some asset account, with a corresponding addition to some capital account such as preferred or common stock or bonds. The effect of a policy of capitalizing betterments, therefore, if long continued, is to inflate the assets and give a false idea of the value of the enterprise. Since 1907, this obligation to capitalize all betterments, adding the increased cost of the new asset, for example, 100-pound steel rails, over the depreciated value of the displaced asset, 60- or 70-pound rails, to the asset account, and showing a corresponding increase in liabilities, has been the rule of the Interstate Commerce Commission. Every company subject to its jurisdiction must capitalize the cost of all betterments.

This is, I believe, an error, although not one likely to be soon corrected. The basis of asset value is not cost but earnings. Many betterment expenditures fail to materialize in net earnings, or if they increase earnings, the increase is below the standard rate, 6, 8, or 10 per cent, on the expenditures. By "standard" rate is meant that rate of return on investment which is required before money will be spent, either out of profits, or out of the proceeds of stock or bond sales. In the early days of the Standard Oil Company, 35 per cent was required to be shown before money would be appropriated for improvements. Railroad companies may be content with 7 or 8 per cent if they can borrow money at 5 per cent. If an improvement can show the standard rate of return, it can properly be capitalized at its full cost. Any deficiency below the standard rate should result in a reduction in the amount capitalized. In case the demand for the service or commodity calls for an increasing supply, an addition

to the plant may increase earnings. The conservative, cautious line of financial procedure is to charge the cost of all betterments to maintenance expense. If the betterment proves profitable, either in reducing expenses or increasing gross revenue, it is well; but if not, as may happen, then no harm is done and false hopes of distribution and "melon-cutting" are not raised. The Interstate Commerce Commission of that distant period believed that many railroad companies were "burying" their earnings in betterments like a satiated and thrifty dog gives his surplus bones temporary interment, and that in some way, not clearly disclosed, at an opportune time, the concealed profits would be dug up and given to the stockholders.

In justice to the Commission, we must admit that, while insisting on the capitalization of betterments, they have left the railroads free to account for this capitalization by crediting any liability account they please. Some companies have increased their surplus account. Others have set up reserves in the manner described in the next chapter.

If now, in concluding the discussion of this subject, it is desired to capitalize betterment expenditures, what is the proper basis? Evidently a conservative estimate of the earnings' contribution of the betterments; the capitalization of an annual increment of earnings on the basis of a certain number of years' purchase. We may, for example, capitalize $50,000 a year as $500,000—ten years' purchase—in a well-established industrial, or as $250,000 —five years' purchase—in some specialty factory. The basis of capitalization is not the cost of the betterment but the returns from the betterment. The same rule applies to additions. A capitalization of cost without reference to return leads to inflation. If one betterment costing $10,000 shows a 10 per cent saving, while another shows 5 per cent, and if the basis of capitalization is 10 per cent, the first may be capitalized at $10,000, while the capital value of the second, based on its income, should not exceed $5,000;

the remaining $5,000 being charged to profit and loss. An indiscriminate capitalization of betterments, without careful inquiry into the increase of earnings from each expenditure, will result in the inflation of assets and is, in effect, the capitalization of expense. The recent protest of the Kansas City Southern against the low valuation of its property by the Interstate Commerce Commission arises out of the failure of the Commission to recognize the capitalization of maintenance charges. It is better to charge the entire cost of betterment to operating expense, or, if greater accuracy of accounting statement is desired, to charge the cost to profit and loss as an extraordinary expense.

CHAPTER XXV

DEPRECIATION AND REPLACEMENT FUNDS

Definition of Depreciation

Well-managed business enterprises, and especially public corporations to whose standing and reputation an accurate determination of their profits is essential, make provision out of their income to restore impairment in the value of their physical assets. This impairment in value or serviceability is known as depreciation. The life of every tool, building, machine, or structure, with the possible exception of permanent structures, such as concrete bridges, wharves, permanent roadway, etc., is limited. No matter how carefully a machine may be repaired, no matter how attentive the equipment department may be to painting cars and rewinding armatures, the time finally comes when the machine, or car, or locomotive, or building is no longer fit for use. Every piece of productive property, like every human being, has a period of mature and vigorous life when repairs are at a minimum and work at a maximum, and a period of old age, finally ending in dissolution. This period of useful service, in a machine as in an individual, may be lengthened by proper care. If the individual does not observe the laws of health, if he works under unsanitary conditions, or is subjected to excessive strain, his working life is shortened. In the same way, unless the machine is repaired when out of order, is sheltered from the weather, and is saved from undue stresses and strains, the term of its active life is reduced. True depreciation is the gradual exhaustion of the efficiency of a machine or a structure, by use, weather, and fatigue.

Obsolescence

There is another kind of depreciation known as obsolescence, out-of-dateness, which constantly threatens to destroy the value of equipment, even though its physical efficiency remains unchanged. Here is a cotton mill, operated by steam-driven machinery. The management decides to install separate motors for each machine. Immediately a large value in shafts, pulleys, and belting is destroyed. These appliances are still serviceable, but they are no longer needed. They are obsolete, fit for the scrap pile. A few years more finds the agent of a power company demonstrating to the management that they can make a large saving by throwing their power plant out of service and buying their power from the central station. The boilers and engines are still in good condition. They stand on the books at a substantial value. But they are obsolete with a trifling secondhand value, hardly enough to pay for their removal.

Or again, a New England textile mill, manufacturing a fabric used in automobile tire-making, finds the demand for its product, as a result of a change in the methods of tire-making, reduced 80 per cent. It can no longer pay expenses. The company must suspend and its assets must be liquidated. As a building the mill may find a buyer. The specialized machinery must be sold for whatever it will bring as machinery or junk. Here is true obsolescence, the extinction of value by a change in business conditions.

Just now the anthracite coal industry, so far as it depends upon the demand for the domestic sizes to give its plants value, is in a fair way to become obsolete. The competition of coke, soft coal, oil, and recently gas in domestic heating is making heavy inroads on the anthracite market. If this movement continues, the high cost anthracite mines, in which perhaps $250,000,000 has been invested, will become obsolete and will be closed until some

new use can be found for the fuel, or until their cost of production can be reduced to admit of a price low enough to carry off the supply.

In the field of anthracite substitutes, as oil is superior to coal, so gas is superior to oil. As oil is making coal obsolete, so gas may make oil obsolete as a domestic fuel.

No industry is exempt from the corrosive influence of obsolescence. The pace of invention and improvement is increasing, each discovery forming a foundation for others, the automobile destroying the interurban trolley and reducing the passenger business of the steam roads, silk replacing wool, rayon replacing silk, cotton replacing both of them, alcohol from coal tar replacing wood alcohol, synthetic nitrate driving out the Chilean product, synthetic rubber threatening natural rubber, welding replacing riveting in structural steel work, electric refrigeration replacing ice, and gas refrigeration threatening the electrically operated machine. Compressed gas has been successfully used as a substitute for blasting powder in the soft coal fields. Illustrations could be multiplied without number. Obsolescence is a universal phenomenon. No industry is immune from its threat.

Depreciation from Obsolescence

Depreciation from obsolescence is especially prominent during the early stages of an industry when improvement is especially active. The large-scale manufacture of ice cream is a comparatively new industry, in which improvement is very active. On the other hand, in long-established industries, such as flour-milling, canning, iron-smelting, and in most branches of the textile industry, the opportunities for introducing labor-saving devices are more limited, and the danger of depreciation from obsolescence is less. The main factor influencing a concern to replace machinery is competition. A leading manufacturer in the trade may introduce a new machine by which he is able to reduce costs

and lower prices. His competitors are forced to follow him. The present competition in the manufacture of window glass where the Libby-Owens Company, by its improved methods, is capturing the market, is a recent illustration. On the other hand, if there is no pressure of this character, as when monopoly conditions prevail, the old machines are used as long as they are serviceable, and only when worn out are they replaced by improved devices. The effect of automobile competition in improving electric railway equipment is well known.

Business depreciation, as distinct from physical depreciation, is the most serious danger which now threatens industry. Conservative financial management demands that ample provision should be made to guard against losses from this cause.

Junk Value in Relation to Depreciation

A strong deterrent to liberal replacement is the small return obtained from the old machinery. As a rule, this has little value, although sometimes, as in printing machinery, discarded machinery can be passed on to the small towns. With power plant machinery, where the installation itself is expensive, discarded machinery has little more than junk value. Not only must the new appliance or machine pay its own way, but it must carry the burden of the residual value of that which is displaced. Suppose, for example, that a proposal is made to a mill to put in oil engine equipment with electric transmission, in place of a steam plant. The oil engine generator and motors cost $21,000. The undepreciated value of the steam plant is $15,000. If the steam plant is thrown out, there is a loss of $15,000 to be written off over, say, five years, and an interest, depreciation, and maintenance charge of $4,360 on the new equipment, a total of $7,360. Unless the oil engine installation will save at least $10,000 a year, it should not be considered.

Necessity of Providing for Depreciation

Understanding now the regular and inevitable, as well as the accidental and occasional reductions in the value of a company's productive property, we see the necessity of providing for its replacement. In so far as these losses can be estimated, accurate provision can be made. Contingent and extraordinary losses, however, can only be anticipated by providing such sums as experience shows will be sufficient to offset these losses. There remain the losses due to such causes as changes in fashion, the introduction of competing products, tariff or railway rate changes, or new inventions, against which no foresight can provide because there is no method of predetermining the amount of the damage.

The losses due to depreciation, if provision is not made to apportion them over a series of years, may fall upon a business with annihilating force. When a plant is new, repairs are light and replacements are not necessary. This condition may persist for several years. In the meantime the management, not seeing the necessity for making provision against the day when their plant shall be worn out, may have paid out most of their earnings to their stockholders. At the end of the fifth or sixth year extensive renewals become necessary, machines are worn out or become obsolete; and a reconstruction, a rearrangement, or a relocation of the plant may be necessary. If money is not available for these purposes, all that the management can do is to issue stock or bonds and spend the proceeds, not in increasing the value of their property, but merely in maintaining it at its original figure.

An illustration on a small scale will serve: A man obtained a pumping contract from a railroad. The contract ran for ten years and called for a payment of $2,000 a year. The cost of the pump and other machinery was $5,000 and the operating expenses $1,000 each year. The

owner gave but nominal supervision to the plant, which indeed was all that it required, and estimated his profits at $1,000 a year or $10,000 during the life of the contract. At the end of the time, however, when the contract came to be renewed, it was found that the pump was worn out, the $5,000 invested had been lost, and it was necessary for the contractor to raise another $5,000 for the purchase of new apparatus. Instead of a profit of $10,000 during the ten years, the actual profits of the business were only $5,000. A correct accounting system would have required the setting aside of $5,000 in such a form as to be available at the end of ten years for the purchase of a new pump.

Methods of Providing for Depreciation

The provision for depreciation is made by building up in the assets of the business an amount of value. Provision for depreciation is made as follows: A deduction is made from income of the amount estimated to be necessary in that year to provide for depreciation. This amount is kept in the business, either being held as a bank deposit, invested in securities, or spent in such a way as to increase the value of the company's property, for example, upon a new building or new machinery. If an expenditure is made, cash is credited, and machinery or plant account, or the materials or securities purchased, are debited. Then profit and loss is debited and depreciation reserve, appearing as a liability on the balance sheet, is credited. This plan is followed year by year, until a depreciation reserve of large amount may be built up as a liability to the business, balanced by various assets on which a certain amount of the income of the company has been spent.

Origin of Replacement Reserves

We must carefully observe the origin of the depreciation and other contingent reserves. They arise out of appropriations to take care of irregularly recurring contingencies.

From these annual appropriations, if the amount is large enough, current replacements are made, and the balance, if any, is carried to the credit of the reserve account. This amount is continually shifting, rising as appropriations are credited to it, and declining as charges are made for renewals, but tending usually to advance.

Now suppose that, after a term of years, since replacement is not usually necessary in the early stages of a company's operations, new equipment is necessary to replace that which is unfit for service, or that a complete overhauling, a relocation, or a reconstruction of the plant is necessary, including a general replacement of its equipment with machinery of improved design. The cost of reconstruction or replacement is provided either out of the income of the company or by an increase of its bonds or stock. The entries are as follows: In case provision is made out of the current income of the year for necessary depreciation, cash is credited and the plant account concerned is debited; then depreciation reserve is debited and plant account is credited for the equipment thrown out. If the old machinery can be sold, cash is debited and the depreciation reserve is credited. If the cost of replacement is too large to be thrown upon the income of a single year, provision for the expense is made in the following manner: The company, we will suppose, presents the following balance sheet:

Assets		*Liabilities*	
Plant and equipment	$2,000,000	Stocks	$1,000,000
Cash and current assets	500,000	Bonds	500,000
		Depreciation reserve.	500,000
		Surplus	500,000
	$2,500,000		$2,500,000

Suppose that $500,000 is required for extensive replacements and reconstruction, and that only $200,000 of this amount can be provided out of the income of that year. Resort is now had to the depreciation reserve, the accumu-

lations of past investment for the benefit of the depreciation fund. The company issues $300,000 of bonds, increasing its debt to $800,000, and reducing the depreciation reserve by a corresponding amount. The proceeds of the bonds together with the $200,000 taken from the cash receipts, are spent in renewing the plant.

Disposition of Balances in Replacement Accounts

The accumulated reservations for depreciation may be disposed of in two ways: (1) they may be handled as a fund and kept in assets which are either specifically set aside for the purpose of making renewals, when these shall become necessary, or (2) they may be kept in the current assets of the business immediately available for use. This is the method adopted by the United States Steel Corporation. The balances to the credit of sinking, reserve, and depreciation funds, which are treated alike, on December 31, 1919, were included in the assets of the company as shown in the following account:

SINKING AND RESERVE FUND ASSETS

Cash resources held by Trustees account of Bond Sinking Fund		$1,662,732.22	
(In addition Trustees hold $128,710,000 of redeemed bonds, which are not treated as an asset)			
Contingent Fund and Miscellaneous Assets		10,983,420.48	
Deposits with Trustees of Mortgages (proceeds from sale of property)		93,296.79	
Insurance and Depreciation Fund Assets and purchased bonds available for future bond sinking fund requirements, viz.:			
Securities	$52,714,162.91		
Cash	5,965,996.39		
	$58,680,159.30		
Less, Amount of foregoing represented by obligations of Subsidiary Companies issued for capital expenditures made	16,655,475.00		
		42,024,684.30	
			$54,764,133.79

The United States Steel Corporation keeps its depreciation and other funds in a form readily available for use,

invested in the current assets of its business as a part of its working capital. If the directors should conclude that a more definite separation of the assets representing these various funds should be made, they could make a special deposit of all the money, or invest it in securities which could be used for nothing else than to provide means for the replacement and renewals as required.

The usual method of handling depreciation moneys is to mingle them with the general assets of the company where they can be put to the most advantageous use, either in increasing the bank balances of the company or its stocks of materials, or in paying its debts, or in additions and improvements to its plant.

The method of balancing reserves with funds kept separate from the general assets of the business must be unreservedly approved. A reserve is built up to provide against some serious financial loss. When the loss occurs, an immediate outlay of money is necessary. If the reserve is balanced by a fund held in cash or approved securities, the money is there, ready to hand. If no fund is kept, financing, which usually means borrowing, will be necessary, and this may be difficult to arrange. The holding of large amounts of cash or approved securities available for contingencies is the safer method.

In most cases, the amount and control of the various reserve accounts is at the unrestricted disposal of the board of directors. There is no contract with anybody relating to the number, amount, or utilization of these reserves. Sometimes, however, corporate mortgages contain a requirement that certain sums shall be set aside for maintenance and depreciation. Unexpended balances in this accounts are not subject to the control of the directors, except to use them for the purposes expressly stipulated in the mortgage.

Distinction between Surplus and Depreciation Reserve

The statement is often heard, that a depreciation reserve is only a bookkeeping item without special significance; that there is no fundamental distinction between the surplus appearing as a liability item on the balance sheet and the depreciation and other reserves which also appear as liability items. Taken together, they represent the total accumulations out of income which are held in the business for the benefit of the business. The only difference between the surplus and the depreciation reserve lies in the fact that the surplus is usually regarded as the property of the stockholders to be distributed to them from time to time, either in cash dividends, or by various adjustments of capitalization, which will be considered in detail in a later chapter. The depreciation reserve, however, is regarded as representing something belonging to the business, which is to be withheld from the stockholders to make good any extraordinary replacements or renewals for which the current reservations from income for the purposes of depreciation will not prove adequate. In the Ford Motor Company, whose stock is entirely owned by the Ford family, there is no need to make a separation between surplus and depreciation reserve. There are no outside stockholders, no absentee owners to clamor for dividends which should not be paid. All profits can be credited to surplus.

Other Types of Reserves

There is, of course, a limit beyond which it is unprofitable for a company to accumulate a depreciation fund. When the amount of the fund has reached the figure which, in the judgment of the directors is necessary to protect the business against extraordinary accidents, future reservations can be treated as a part of the surplus and eventually distributed to the stockholders. As

an example of such a distribution, the stock dividend of the Pullman Company, voted on February 10, 1910, was explained by the directors in part as follows: "There were certain reserve accounts in the manufacturing department which had hitherto been held in abeyance to meet contingencies which were possible to arise (fire insurance), but which present conditions render improbable. These items, together with the existing surplus as shown in the published statement of the last fiscal year and the current results of operation, are regarded by the board as a justification for making this recommendation." The Pullman Company, in making these dividends, transferred certain of its reserve to its surplus account, and then substituted for a portion of the surplus an equal amount of capital stock.

The balance sheets of conservatively managed companies may show reserves in addition to the depreciation reserve. For example, a reserve may be kept for collection expenses and receivables to provide for losses which may ultimately be sustained in the realization of bills and accounts receivable. The Goodyear Rubber Company, on December 31, 1925, set aside a raw material reserve to provide against losses due to a fall in the price of crude rubber. During the following six months, the price of rubber declined from 90 cents a pound to 42½ cents, and $5,185,936 of resulting inventory loss was charged to this raw material reserve.

A company may also, when it is deemed wise to carry its own insurance, maintain an insurance reserve, usually balanced by a fund of cash or securities, and a dividend reserve, also balanced by a fund of readily convertible assets may be kept to make good temporary shortages in income available for distribution to stockholders. These reserves are built up out of the unexpended balances of the annual appropriations to these several purposes in the manner already described. The Federal Corporation Tax Law recognizes only depreciation, depletion, which has

been discussed in connection with sinking funds, and insurance reserves. Other reserves may be established at the pleasure of the directors but amounts carried to their credit are not deductible from income liable to the 12 per cent tax. Illustrations of such reserves are bond discount reserves and tax reserves.

CHAPTER XXVI

MANAGEMENT OF DEPRECIATION

Calculation of Depreciation Rates

In calculating physical as distinct from financial depreciation, the first step is to determine the amount necessary. This is figured as a percentage of the cost of the property to be depreciated. The percentage is obtained by estimating, sometimes in great detail, the active life of different kinds of equipment and dividing the result into 100, to obtain the annual rate of depreciation. By the method ordinarily followed, no account is taken of compound interest. If a business or property is estimated to last for twenty years, 5 per cent of this cost is assumed to be reserved out of income in each year in order to make good the annual depreciation.

A schedule that might be used for a street railway company is shown on page 293.

These various percentages are applied to the costs of the equipment, and the results added together are assumed to give the annual requirement for depreciation for that year.

These rates, however, are subject to wide variations under different conditions. C. I. Sturgis has explained these variations in relation to railway equipment as follows:

> On a railroad, the life of ties varies with soil and climate; the life of bridges depends on the weight of locomotives running over them; the life of locomotives depends on the quality of water and coal with which they are fed, and there is hardly a railroad tool or machine the life of which does not depend on local conditions, and even if, in determining depreciation, we

could approximately estimate such variable factors as these, we would still have to consider what in the end will be the cost of the new articles to replace the old, and with markets ever fluctuating that is impossible definitely to determine. Furthermore, prosperous roads, in maintaining high standards, consider equipment is worn out when, on poorer roads, it would be considered still good for many years of service.

	Life, Years	*Rate, per cent*
Track, ties, bonding, etc	12.85	7.75
Paving and grading:		
Granite block	16	6.6
Cobblestones	25	4
Electric equipment of cars	12–15	8.5 to 6⅔
Iron poles	20	5
Power plant equipment	15	6.66
Shop tools and machinery	20	5
Buildings and improvements	50	2

While admitting the influence of local conditions such as climate upon assumed rates of depreciation, it is possible to give proper weight to these influences on the basis of experience in that locality, and to ascertain, with a fair degree of accuracy, the life of the company's property. It is also possible to ascertain, as we have explained in our discussion of maintenance, the effect of high and low standards of maintenance on depreciation. Property which is well maintained will last much longer, and give more effective service, than where maintenance is neglected. We may conclude, therefore, that depreciation due to wear and tear and to natural decay can be closely approximated.

Depreciation due to obsolescence and extraordinary accidents involving extensive expenditures upon the plant cannot be estimated even approximately. A textile company imported an expensive machine from England and estimated that it would last only five years. A depreciation rate of 20 per cent was established. Within two years, however, this machine was displaced by a better one, so that the correct rate should have been 50 per cent. Other illustrations are the passage of city ordinances re-

quiring large expenditures on track elevation or electrification to abolish the smoke nuisance. Such changes cannot be foreseen.

Partial provision, it is true, may be made in the manner already indicated by establishing various rates of depreciation, accumulating reserves against various contingencies. These reserves are available for emergencies. But even the most conservative company cannot make suitable provision out of its income accounts to protect it against any contingency which might arise. For example, depreciation on telephone equipment can be figured at 10 per cent per annum. This will provide for the replacement of the plant at the end of ten years. But suppose the town is visited by a hurricane and most of the plant is destroyed. This would be a contingency against which no foresight consistent with ordinary business practice would provide. All that can be done in the event of such a catastrophe is for the owners of the business to take their loss and build anew, increasing their toll rates, if need be, in order to regain the money spent for the reconstruction of the plant.

Guarding against Depreciation due to Business Hazards

Business foresight will anticipate many of the necessary changes and losses of business, and will accumulate reserves to meet these emergencies. The anthracite industry, for example, is faced with the growing competition in house heating of oil and gas. To counteract this competition, the anthracite operators are carrying on a campaign of education in the household use of the small steam sizes of anthracite. The Victor Talking Machine Company was almost ruined by the competition of the radio. It improved its own devices and records and combined with the radio manufacturers to produce a composite instrument. The railroads are hard pressed by motor bus competition. They establish motor bus lines of their own. These are typical instances of obsolescence, partially

overcome. Only well-financed companies, however, can meet these emergencies.

Sometimes obsolescence results from technical mistakes. For example, the case of the Servel Company previously referred to is an excellent illustration of speedy obsolescence which carried the company into bankruptcy.

It is essential to the safety of a business that large reserves should be accumulated. The reserves allowed by the Internal Revenue Bureau are entirely inadequate to provide for such emergencies. They make no allowance for business hazards. As an offset to this sort of depreciation, several accountants and engineers have urged the natural appreciation in the value of the property, due to the development of its business.

It is claimed by Frederick Delano that

> the depreciation due to the diminished value of equipment, track, bridges, structures of all kinds, shops and shop tools is limited and is, furthermore, more than counterbalanced by the appreciation due to the fact that the railroad has an established business which amounts to more in the case of a railroad than does "good will" in the case of a mercantile corporation. Industries, mines, and factories are established along its lines with switches and side-track facilities, towns grow up, and a certain amount of business becomes assured which requires time, money and energy to develop—all of which is charged into current operating expenses, and should be considered as an offset to any depreciation of the property.
>
> Besides the appreciation due to these causes there is also physical enhancement of value due to the solidification of the roadbed and embankments, the establishment of water-courses and the replacement of the original structures with others of a more permanent character, without any addition to capital account; thus, wooden trestles, bridges, culverts, etc., have been filled with earth or replaced by steel or iron, stone or concrete.
>
> No estimate can be made, moreover, of the enhanced value of the right of way and terminals due to the growing values of land, even though the existence of the railroad may have contributed largely to the development of the country through which it runs. The railroad corporation suffers from this increased value if it is

compelled to purchase any property as well as in the increase in its taxes; but it has not been usual to make any allowance for this. Railway men generally believe that the appreciation of the property above described more than balances the depreciation; especially when it is remembered that the total physical depreciation under proper maintenance rules is limited to half the first cost of the property.[1]

The considerations advanced by Mr. Delano should be kept in mind in fixing depreciation rates. In the writer's opinion, however, it is unsafe to go as far as he does in claiming that appreciation offsets depreciation. This increase in the value of a business is dependent to a large extent upon the conditions of trade. Certainly, from 1892 to 1897, there was no appreciation in the value of railway property in the United States. At this time a large amount of railway mileage was in the hands of receivers, and railway earnings were greatly depressed.

There is only one safe rule to follow in the determination of questions of this character—to take the side of conservatism in the disbursement of earnings. As between deducting too much for depreciation and taking too little, the first course is usually to be preferred. Excessive depreciation means that money which would otherwise be available for dividends is retained in the business, covered up and concealed from the clutching hands of stockholders, but eventually appearing on the right side of the income account No one can be injured by conservatism in these matters, and the hazards of business are so great that any doubt as to the propriety of such deductions is always to be resolved in favor of the conservative course.

Secret Reserves

Many companies, especially financial institutions, go even further and accumulate hidden reserves "to guard

[1] Condensed from an article by Frederick Delano, formerly President of the Wabash Railroad Company, in *The Railway Age Gazette.*

against disaster." This is usually done by marking down assets, such as patents, below their real value, or carrying other assets, such as real estate, or "securities at cost," making no allowance for appreciation. The General Electric Company, for example, carries its patents at a valuation of $1. This is supposed to include a half interest in the patents held by the Radio Corporation of America, a patent-holding company. The undervaluation of patents is quite common. Financial institutions are peculiarly liable to heavy losses from bad loans. The existence of these secret reserves enables such losses to be covered up and kept from public knowledge. Their disclosure would have a most unfortunate effect on public confidence. As long as these secret reserves *are kept in the business,* no harm is done. Where, however, as happened with the Northern Pacific, some years ago, the stock of a lumber company carried on the books at $350,000 and worth $18,000,000 is suddenly sold and the proceeds distributed as a special dividend, the directors are apt to be criticized by those who sold the stock just before the revelation is made.[2]

Summary of Rules of Depreciation

In final summary of the rules of depreciation the following may be taken as conservative: (1) charge to maintenance the cost of minor replacements, even if the cost of the property substituted for that worn out or displaced by a better machine is greater than that originally purchased; (2) maintain depreciation rates based on standards

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[2] The Interstate Commerce Commission, in an order dated November 2, 1926 took advanced ground on depreciation. Before that time charges to depreciation were not compulsory except as to equipment on which 3 per cent was required to be charged. The new order requires the carriers to charge depreciation on all classes of property, to charge the estimated amounts currently to operating expense, crediting them to depreciation reserves.

The order also requires the carriers to set up reserves for accrued depreciation as liabilities and establish suspense accounts among its assets as a balancing item.

established by engineers familiar with the business in which the corporation is engaged, and after making due allowance for special and local conditions; and (3) provide additional reserves for special classes of losses not covered by outside insurance.

Sinking Funds and Depreciation Funds

A comparison may be made at this point between sinking funds and depreciation. There is a superficial identity of these two classes of deductions from income. The sinking fund, whether maintained against so-called "wasting" assets—that is, coal or ore—or against the plant of an electric railway, or the terminable franchise of a public service corporation, up to the percentage of the total cost of the company's assets which is represented by its bonds, and up to the percentage of the cost of the property which is represented by the sum of annual appropriations for the sinking fund, is usually regarded as the equivalent of a depreciation charge. If the cost of the entire property of a company is represented by its bonds, which sometimes happens, and if its life is twenty years, a sinking fund of 5 per cent on the bonds is the same as a depreciation of 5 per cent on the cost of the property. At the end of the twenty years, the plant is worn out, the bonds are paid, and the company is back where it started, with the addition of the goodwill and prestige which it has accumulated. It can then incur a new debt for the original amount, probably at a lower rate of interest, rebuild its plant, and maintain its surplus intact.

As a practical matter of safety of bonds and preservation of the physical efficiency of the plant, the identification of the sinking fund with depreciation is unsound. The sinking fund is maintained to reduce the debt, on the general theory that business affairs are uncertain and that debt should therefore be reduced, whether or not the assets of the company are of the kind called wasting. On the

other hand, a depreciation reserve is built up and current renewals are made so that the plant may continue as a working unit, that the business may live, and not die a sudden and unnatural death. If the sinking fund were large enough to pay off the entire debt before the plant needed extensive renewals, then the bondholders would be safe, it is true, but the stockholders would suffer the loss of the money necessary to rebuild. If the stockholders had received in dividends the amount, which at the end of the period they were required to put into rebuilding, then they might deceive themselves into thinking that they had suffered no loss. In most cases, they would have difficulty in raising the money. Many receiverships followed by drastic reorganizations have followed this course. Bond payment by a sinking fund, and provision for plant renewal by a deduction from profits are entirely dissimilar. The objects are different. The methods are different. If considerations of safety are to govern the financial policy of a company, a sinking fund must be maintained to retire, or at any rate, largely reduce the debt, and liberal allowances for depreciation must be made to replace and renew the equipment and the plant.[3]

Handling of Depreciation Charges

We have next to consider the financing of depreciation. Shall the depreciation charges be annually deducted from income as are maintenance charges and sinking funds, or shall the directors be given a certain amount of liberty in concentrating these charges upon years of large earnings? The various public service commissions which have passed rules on the subject and the Interstate Commerce Commission have always inclined to the opinion that depreciation should be a fixed quantity to be deducted every

[3] A. S. Dewing in his *Financial Policy of Corporations* has developed the above line of reasoning at some length and with convincing emphasis.

year. The Wisconsin commission, for example, provides that:

> Every electric railway shall carry a proper and adequate depreciation reserve to cover the full replacement of all tangible capital in service. There shall be opened a depreciation account, to which shall be charged monthly, crediting the depreciation reserve, an amount equal to one twelfth of the estimated annual depreciation of the tangible capital in service of the railway, or as near that amount as the finances of the property will permit.

On the other hand, the view of this subject which formerly prevailed among operating officials was expressed by Frank R. Ford, of Ford, Bacon & Davis, as follows:

> The depreciation fund is essentially a financial problem, the solution of which is apparently by law left to the directors of the corporation as they are empowered to determine the amount of current income to be set aside for working capital and the amount of dividends to be declared. It is questionable if utilities commissions can lawfully impose rules for the charging of depreciation in cases where the physical property is fairly maintained and securities properly issued. I believe that no hard and fast rule can be laid down for charging a fixed amount to such a fund month by month or year by year; the proper amount to be charged should be known, and if in lean years this amount is not laid aside, in prosperous years the deficiency should be made up. It might even be necessary to use this fund for other purposes than renewal of physical property, due to business contingencies unforeseen.

Depreciation Charges in Relation to the Corporation Income Tax

Mr. Ford's view, while it may be endorsed when viewed solely from the standpoint of financial administration, must be considered obsolete in the light of income tax regulations. A tax of 13¾ per cent on corporation profits, makes it imperative that every lawful deduction should be made from the income of each year. The text of the law and

its administration favor large deductions for depreciation, and, by implication, the building up of ample reserves, both for depreciation and other contingencies. If a company tries to concentrate its depreciation appropriations into years of large earnings, in order to take credit in its tax statements for excess depreciation, it must convince revenue officials that its allowances in former years were not sufficient, and this may be difficult to do more than once. It is far better to deduct the full amount allowed by law each year, and also to put as much as possible of these reserves into special funds immediately available for replacements. By holding replacement funds in liquid form, a company will not merely be able to make its renewals at the time when costs of construction are lowest, but if these funds are continually being expended, earnings will be increased by the substitution of superior devices which may cost no more than those which they displace. A salutary feature of the corporation income tax has been the encouragement which it offers to the building up and utilization of large reserves.

Do depreciation charges enter into cost of production? In the strictest interpretation of the term depreciation, it is an element of cost. Provision must be made for replacement of the worn-out plant before profits, the difference between cost and selling price, can be computed. If this is not done, profits are overstated to the extent of the deficiency in replacement charges. As a matter of expediency, however, it is unwise to add depreciation to so-called "prime" cost, that is, the out-of-pocket money spent to produce the commodity or service, but to consider it as an element of secondary cost, which includes such items as depreciation, insurance, taxes, and overhead expense.

The importance of this distinction between prime costs and secondary costs, lies in the use of costs in fixing the selling prices. The rule is that up to the capacity of the plant any business will be taken which yields anything to-

ward paying secondary cost. In fixing railroad rates, for example, up to the capacity of the railroad plant to move freight, any freight will be accepted which yields one-fourth cent per ton-mile over the cost of receiving, moving, and delivering. If the company based its freight rates on total cost, stone, sand and gravel, and such low-priced commodities would not be moved, and the railroads would not make the very considerable revenues which they now receive from this freight. By separating costs into "primary" and "secondary" and establishing the primary cost as a dead line below which the price or rate cannot be lowered, the business can safely accept orders at less than total cost, but greater than prime cost, and so make profits which would otherwise be lost. In this sense, depreciation does not enter into cost of production.

CHAPTER XXVII

MANAGEMENT OF WORKING CAPITAL

The Cash Balance

The working capital of a business consists of its liquid assets. Net working capital is also recognized. This is current assets less current liabilities. Current assets consist of cash, accounts, and bills receivable, raw materials, goods in process of manufacture, and finished product, and—an increasingly important item—investments in other companies expressed in the form of stock and bonds. All of these assets except the first and the last mentioned, cash and investments, are on their way to the cash balance. Accounts and bills receivable will be quickly turned into cash. Finished products will turn into accounts receivable; raw materials into finished products, at each step approaching more nearly the final form, the object of all business activity, cash. As for the investments, they take an occasional short cut to the same destination, as when they are either sold or pledged to replenish the cash balance.

In every business there is a man whose duty it is to sign checks. He pays supply bills, draws checks for pay rolls, salaries, rentals, taxes, interest, and dividends. Out of the company's bank account, under his guidance, flows a stream of disbursements, rising and falling with the seasons and the volume of business, but never ceasing. Upon this official, call him treasurer, comptroller, what you will, also rests the responsibility of replenishing the reservoir of cash which is constantly running away. His task.

supremely important, is known as the management of working capital.

The management of working capital centers upon the preservation of the cash balance. To this end, goods must be first produced; second, sold; and third, the proceeds promptly collected. No treasurer can make bricks without straw. Profitable production quickly and regularly sold is essential. But if the sales are not made to responsible persons, the goods are given away. If the proceeds are not promptly collected, the concern is always struggling in a morass of debt incurred to meet current expenses which prompt payment of receivables would have made unnecessary. All this is trite and commonplace but often neglected. It will do no harm to recall some of the proverbs.

Functions of the Commercial Bank

At this point in the narrative enters the commercial bank, the friend and partner of the treasurer in keeping up the cash balance to the necessary level. Most business is seasonal in character. Sales and receipts are often concentrated into short periods. The coal trade is active in winter; the grain trade in the fall; the agricultural machinery and automobile trades in the spring. Even railway traffic has its heavy seasons and its slack periods. Expenditures cannot be adjusted to these variations of revenue. Pay rolls run on. Taxes, insurance, interest, and dividends have no off seasons. No sooner does the treasurer discharge one set of obligations, than another group confronts him. He is like a hard-working gardener, struggling unceasingly with the weeds. His task is never finished. The adjustment of fluctuating receipts to persistent and constantly recurring disbursements can be accomplished by two methods, singly or in combination. Either the cash balance must be large enough to meet obligations while receipts are running behind disbursements, or the

concern must utilize its credit and borrow the necessary balance.

A brief digression may be permitted at this point as to the place of the bank of deposit and discount in our scheme of production and distribution. The function of the bank is plain. Its service to the business man is valuable. The bank bridges the valleys between the peaks of sales. It enables the business to meet its current obligations without embarrassment, to maintain its credit, and to satisfy its stockholders. By means of these loans either secured by collateral or endorsement, or else by the sale of plain paper direct to his own banks or in the commercial paper market, the treasurer keeps himself in funds and his stream of disbursements never runs dry. A large part of the time and attention of financial men is spent over this matter of loans: when to borrow, how much to borrow, and on what security. Books on banking and so-called "practical" or "applied" finance are full of maxims culled from the experience of others as to the methods of borrowing applicable to different situations. The bank is justly regarded, next to the railroad, as our most important institution.

The natural place of resort of any one who wishes to borrow money is a bank. Corporations consider banks as places where they can obtain funds for any proper purpose. The National Bank Act has authorized the purchase of promissory notes by banks, and this has been stretched to sanction the purchase of bonds sometimes maturing fifty years from the date of purchase.[1] Banks are the largest bond buyers. Even when the bank is not able to purchase the security outright it usually will make a loan, using the security as collateral.

Corporations resort to banks for a variety of purposes: to pay dividends in part or in whole, when cash is not

[1] A recent amendment to the National Bank Act now formally sanctions the purchase of bonds under regulations established by the Comptroller of the Currency.

immediately available; to purchase materials, or to carry materials already purchased; to convert accounts receivable into cash; to make additions and betterments. In brief, whenever money is needed, the bank is expected to furnish it, and when the security is satisfactory and the corporation borrower has carried a satisfactory balance at the bank, the bank generally does advance the funds needed.

Bank Deposits

A bank deposit is a promise issued by the bank to the depositor to pay him money on demand. This promise the bank must at all times be in a position immediately to redeem. The depositor receives evidence of the promise in his pass book and forthwith proceeds to put this credit in circulation by issuing checks against it. With these checks he makes all the payments which the necessities of his business require. Occasionally he will cash a check, as, for example, when he needs the money for a pay roll, but for the most part he employs the deposit or check currency as a means of payment. More than 95 per cent of the business of the country is done by checks drawn against deposits and deposited by those who receive them. These checks are seldom turned into money. When there is any doubt in the receiver's mind that a check is good at time received, he insists upon certification, by which the bank, on the check itself, evidences its obligation to pay the money. Checks are, however, as a rule, neither turned into money nor certified. As fast as they are received they are deposited for collection. Checks offset each other, through the processes of clearing and collection, with the result that the banker is able to keep outstanding, with the aid of his inactive accounts and the balance which his borrowing depositors carry, an amount of promises to pay money on demand—deposits, that is to say—many times greater than the amount of actual money which he has in his vaults to meet these promises.

The banking laws of the United States specifically recognize this nature of banking deposits, that they are designed to multiply many times the efficiency of each dollar of gold.

The foundation of our monetary system consists of gold coin. This is merely a commodity adopted as a standard of value by all countries, manufactured into pieces of definite weight and fineness by the mint and accepted everywhere without question. In addition to gold the United States has issued large amounts of token money which consists of promises to pay gold, on demand. The national banks have also issued their bank notes, the Federal Reserve banks have issued $2,831,749,000 of Federal Reserve notes, and banks, and trust companies have issued over thirty billion dollars of deposit liabilities. Under the National Bank Act a country bank is required to carry no more than 3 per cent of its demand deposits in the form of gold: the rest of its reserve can be deposited with the Federal Reserve bank and the Federal Reserve bank can in turn lend 65 per cent out of every dollar of its deposits to its members. The result is, as we have seen, that the business of the United States is done with these promises to pay money on demand and is backed up by a comparatively small amount of the thing which is promised, namely, gold. Gold is the foundation, and credit is the superstructure of the medium of exchange.

This system works satisfactorily under ordinary conditions. As long as no one raises the question whether a bank can redeem all of its deposits, the bank can continue to issue these promises to pay on demand in return for promises to pay at some future time, or on demand, and can charge much higher interest than it pays on its promissory notes of borrowers. A bank will pay 3 per cent on time deposits and 2 per cent on checking accounts, while lending its funds at 6 to 10 per cent. It is this differential, between what it pays and what it receives, which constitutes the profits of banks—and profits of banks are very large.

The working of this system depends, however, upon the banks' ability to satisfy, in case they are called upon to do so, their deposit liabilities in accordance with the terms of their promises. The theory underlying the Federal Reserve Act is that, if all the depositors of a bank should form in line and demand actual money for all deposits standing to their credit, the bank should be able to meet these demands. The nearest Federal Reserve bank would be appealed to; bills receivable of the bank would be turned over either by rediscounting or hypothecating; and the bank would receive Federal Reserve notes to meet every claim of its depositors.

In order that this system of turning one kind of liability (bank deposits) into another kind of liability which will be generally accepted (Federal Reserve notes) should work in such an emergency, bank deposits should be invested only in self-liquidating paper or notes issued against the maturity of profitable business transactions. A bank lends its demand obligations, and it must stand ready to redeem these at any time. If it exchanges them for bonds maturing in thirty years, or for notes of its customers secured by inactive stocks and bonds or for notes secured by real estate mortgages, or by installment lease contracts, for which it could not find a market except at a heavy discount, by so immobilizing its obligations the bank is placing itself in a position where, if trouble arises, it might have serious difficulty even in meeting the demands of depositors. The aid of the Federal Reserve bank would be available in case the amount of requests would not exhaust the note issue power; that is, so long as a 40 per cent gold reserve could be kept against note issues. But it would be impossible for the Federal Reserve System, to meet an emergency such as was presented in 1907, when the entire country suspended payment because of the enormous demands for cash.

Bank Loans

The only way in which the banker can be certain of maintaining his solvency at all times is to exchange his demand obligations for promissory notes, drafts, and bills of exchange which will be paid out of the proceeds of maturing transactions. The ideal loan for a bank to make is the purchase of an accepted draft representing the sale of goods or the performance of service to or for a solvent customer, drawn upon that customer, accepted by the customer, endorsed by the drawer, and sold to the bank. When the bank has the security of two-name paper for a transaction which evidently shows a profit, an unconditional obligation arising out of the purchase of goods, with additional security of the seller—when the bank's funds are invested in paper of this character it is, in the language of the fraternity, a "sound" bank. When, however, the bank exchanges its deposit liabilities for corporate bonds, or for promissory notes secured by bonds or stock, or for the notes of corporations or individuals, issued to obtain funds for construction purposes, where the borrower expects to renew indefinitely, making small reductions from time to time—under any of these conditions the banker is violating the canons of sound banking, and is running a risk of being unable to meet the calls of his depositors.

This principle of sound banking was clearly recognized by the framers of the Federal Reserve Act in that notes should not be available for discount which represented transactions in stocks and bonds. No notes secured by collateral should be available for discount. The thought underlying this provision of the act was that the Federal Reserve System should facilitate movement of commodities from producer to consumer, that the paper which the Federal Reserve bank should take over should be self-liquidating paper, and that the maturity of the contract would furnish the borrower with means of repaying the loan.

If a bank applies this test of self-liquidation to every loan it will never be embarrassed. In case its depositors press for money, it can, without too seriously curtailing credit accommodation by ceasing to loan, transfer enough bills receivable to the Federal Reserve bank of its district or to some correspondent to meet the emergency.

All that is needed is for the bank to stop lending, and within four months most of its paper will automatically convert itself into money which can be paid out to depositors in literal redemption of bank paper.

By this test the legitimacy of all corporate loans is to be judged—whether they anticipate the proceeds of business transactions which will mature in the near future. It is unsafe for a bank to invest money which is to be put into any form of fixed capital which will do no more than return a safe margin over the interest on the loan. Bank loans must be either paid when due, principal and interest, or materially reduced. Experience shows that permanent capital cannot be obtained from the commercial bank. Most bank failures which do not result from dishonesty of bank officials have been caused by locking up of banks' obligations in securities which could not be quickly converted into money. The failure of the Knickerbocker Trust Company in 1907, which precipitated the panic of that year, was due to the advance of large sums on construction propositions. The epidemic of bank failures in the last two years was largely due to loans on real estate security, notoriously the slowest asset of all.

The business of the bank is to supply the temporary needs of business for working capital. Nearly every business is, to some extent, seasonal in character. The agricultural implement dealer, who sells to the farmer, may deliver machinery in the spring and wait until after harvest for payment. In the fall, when he has collected for the season's sales, and has only begun to manufacture for next season, there will be no need for the implement manu-

facturer to borrow largely from the banks. The amount of capital locked up in machinery sold, will, however, steadily increase as the season advances, until, before harvest, he will have a large temporary investment in notes and accounts. It is not considered economical that the manufacturer should have invested sufficient capital to carry his business for the entire year without resort to the banks. If such a policy be decided on, for a part of the year, the manufacturer would have on hand a large amount of capital on which he might be paying 6 per cent dividends while receiving only 3 per cent for it from the banks.

The manufacturer of agricultural implements obtains notes from his customers, and these notes are used as collateral for his own notes, which are sold to banks. When the notes mature they are paid out of the proceeds of collections. This illustration shows the principal contribution of the banks to the working capital of industry. Banks sometimes extend permanent credit to concerns which are growing rapidly and require an increasing working capital, but the banks' contribution should be only a portion of the working capital of the business. It is better that a company should provide for the normal amount of working capital, resorting to the banks to supply the seasonal demands for capital, and, also, any extraordinary demands to meet which permanent provision cannot be made.

We may now summarize the classes of loans to corporations which may be safely made by commercial banks.

1. Discounting of trade acceptances.

2. Loans against stock assessements where the stockholders have already paid in a sufficient amount to make it certain that they will meet the call or where they are known to be solvent.

3. Loans against stock or bond sales secured by underwriting or subscription commitments. These are, although

not recognized by the Federal Reserve Act, essentially the same as loans made to facilitate the movement of grain from producer to consumer. The investment banker is the middleman here, the same as the wholesaler who sells commodities; for, as the wholesaler passes goods on to the retailer, and the retailer on to the consumer, so does the investment banker pass his wares to the investment houses, and they in turn on to the individual purchaser. It is entirely proper for the commercial banker to lend large amounts to the investment banker, since the investment banker is incessantly at work to dispose of such securities, and since he is as certain to do so as the salesman of any other kind of merchandise.

4. Loans for extensions of new constructions or for working capital, the purpose of which is to complete profitable construction already in hand. It is a common thing, for example, for a shipbuilding company to make large loans from banks to complete construction of this nature. The loans are safe because when the ship is completed money is available to pay the loan. The same thing is true of any construction the completion of which can be fixed at a definite time and where the payment of money is properly secured.

5. Loans to cover variation in seasonal receipts of money. These have already been described. This money may properly be used for such purposes as payment of interest or dividends, if only the amount of the loan is clearly in sight on basis of business done.

6. Loans on short term notes secured by collateral of recognized value.

Utilization of Bank Credit

We see how the commercial bank can be used to supply a large part of the working capital of a business. As sales increase, drafts can be drawn against purchasers, endorsed by the purchaser, and discounted by the seller, or the seller

can borrow on his plain note, making an exhibition of the state of his business to the bank to show that in the ordinary course of business, the loans will be repaid by the collection of receivables; or he can assign the accounts themselves to the bank, or warehouse his raw material and merchandise and borrow on warehouse receipts; or, if he has good collateral, he can make a loan on very favorable terms as to interest and duration. By utilizing his credit, the business man can turn his sales into cash, establishing a sort of revolving fund in the bank out of which he makes his disbursements, and into which his receipts are steadily pouring. His own capital is invested in his plant. He may rely upon the bank to furnish a large part of his working capital. And he may do this with entire safety, in full confidence that the banker will take no advantage of his situation, will work with him, and help him with advice, information, and assistance—for example, in renewing loans which it is not convenient to pay, or carrying customers' paper which is being reduced by installments. American bankers coöperate with business men. They delight in helping small accounts grow into large figures.

Two important objections are raised to the custom of relying upon banks. The first is the danger implied in the scriptural adage: "The borrower is servant unto the lender." If a loan is made on valuable security, there may be danger of what the courts call "oppression," the forcing to sale of property by a lender—not to obtain his money, but to get possession of property at a low figure. Fifty years ago the Fiji Islands were prosperous. The natives owned the land. They were temperate and contented. Alienation of land was allowed, however, and an appetite for strong drink was developed. In order to buy rum, they mortgaged their lands to Chinese, who, when the natives could not pay, stripped them of their lands and became their masters. In American Samoa, rum is excluded and alienation of land is not allowed. The natives,

therefore, are saved from the fate of those in the French possessions. In the province of Quebec, French business men, I am informed, prefer to deal with English banks since French bankers will occasionally use the loans to take their business away from them. As a potential danger, this is always present, especially in open or unsecured loans. Even in the United States, in the famous case of Willett *vs.* Herrick, certain prominent financiers of Boston and New York were convicted in a civil suit of conspiracy to appropriate property of the plaintiff by the oppressive use of bank loans.

Such cases of conspiracy to defraud are unusual. To say nothing of the natural aversion of decent men to such shady and disreputable practices, most large borrowers have friends and connections, and the gain to a bank from oppression might be paid for by raising a large crop of vindictive enemies. Banking is a highly competitive business and bankers must solicitously guard their reputation for fair dealing. In the Willett case, the plaintiff had, apparently, no friends, and it seemed safe enough to practice upon him. Unfortunately for the conspirators, the plot was thoroughly ventilated, and the huge verdict, even though reversed on technicalities by the State Supreme Court, will for years act as a wholesome deterrent to proposed variations from the path of righteousness.

Interest

Another objection to bank loans may be raised—interest, sometimes 5, usually 6 per cent, sometimes much higher. As one veteran business man, inarticulate but struggling for adequate expression, put it: "Interest eats, interest eats, it eats like.everything." This view requires attention. True it is, that borrowing, for men of good credit, especially when possessed of collateral, is easy, and repayment of loans, while more difficult, involving, as it does, the pain of parting with money, is well within the borrower's abil-

ity. If the proceeds of the loan have been productively expended, or if made in anticipation of known receivables, or to anticipate the receipts of business which long experience shows will almost certainly be realized, the repayment of the loan becomes almost automatic. Money flows out of the bank's funds into the borrower's account and, after a period, flows back through the borrower's account into the bank's possession to be again advanced to borrowers in a never ending revolution of advances and repayments. But this service, valuable though it always is, vitally indispensable though it may sometimes be, is not free service. Banks and trust companies in the United States receive annually an amount which has been estimated at not less than one billion, five hundred million ($1,500,000,000) dollars in interest, which is paid out of the gross profits of business, reducing them to that extent. How can the payment of this huge sum be justified? Would it not be well, in case some alternative method could be devised, to escape this burden?

Quick and vigorous is the response to the objection. The bank lends money, let us say, at 6 per cent. The business man takes the money and makes 8, 10, or 12 per cent. He shows a large profit on the transaction, and since the bank is not lending the money of its stockholders, but in large part its own promises to pay which serve as money, both parties to the transaction profit.

I have before me a report of a scrap iron business whose working capital is $12,500. This business is irregular, prices showing wide fluctuations. During dull seasons, the company buys large amounts of scrap, which can then be obtained at low prices, with the expectation, based on long experience, of selling this material when the steel business revives, at an average advance of 20 per cent. About $50,000 was borrowed for this purpose during the last depression. Interest charges amounted to $3,000 and profits to $10,000, leaving a net gain of $7,000 made on the bor-

rowed money. More familiar illustrations are furnished by the loans made to take advantage of cash discounts. Most lines of merchandise grant cash discounts of 2 per cent. Sometimes, however, the discount terms are much more liberal, rising to 4 per cent, and even as high as 7 per cent in exceptional cases. If a concern expects to pay its bills within a ninety days' limit in any event, by borrowing $5,000 for this period, which will cost $75 and taking advantage of the cash discount, a profit of $25 is shown. If the terms of payment are less than sixty days and the discount terms more liberal, the profit on borrowing for this purpose is increased. We have already seen the advantage to the concern doing a seasonal business—such as a fertilizer or agricultural machinery company, in using the banks' funds for a part of the year when its own money, in case it should provide enough cash capital to finance its business without resort to the banks, would bring only the low rate paid on bank deposits. There are also the opportunities which come to every business to make purchases on especially advantageous terms, and this money can be borrowed and show a large profit over the interest cost. An intelligent use of his bank is properly regarded as one of the most essential qualifications of the successful business man.

Practices of Successful Corporations

We must concede the force of this argument. It is strong and well supported by familiar facts. It remains to examine into the practice of the largest and best managed corporations, to determine the extent to which they avail themselves of the lending facilities of the banks in supplementing their working capital.

We should expect to find in these companies a general resort to credit, for they are the favored borrowers. Their stockholders and directors are dominant factors in the largest banks. Their credit is unquestioned. Bank loans

to any amount they could advantageously use would be instantly placed at their disposal, and these loans could be carried indefinitely. And yet, we find that, contrary to their evident advantage, apparently choosing the expensive path, the largest corporations, with few exceptions, are not borrowers, do not use the unlimited bank credit which they possess.

First comes Henry Ford. He is the largest and probably the most successful business man in the world. To accumulate one billion dollars of property in twenty-four years is a feat beyond parallel. Nothing resembling or remotely approaching this performance has ever been known. Beside this extraordinary accumulation, considered merely as a heaping up of riches and saying nothing of the methods by which the result was accomplished, the achievements of Carnegie, Morgan, Harriman, even of Rockefeller, are inferior. These men were favored by opportunity. They worked with powerful groups of financiers and politicians and business men. They had every resource and device of accumulation at their disposal. Some of them, notably the Rockefeller group, profited enormously from the appreciation in the value of properties taken over at low prices in satisfaction of loans. Others, like Mr. Harriman, were masters of the stock exchange. Others, like Mr. Carnegie, took advantage of a favorable conjunction of circumstances, to double their fortunes almost overnight. Mr. Ford, however, has had no powerful associates. He seems to dislike associates. He bought them out as soon as they became valuable. He shuns the stock exchange. He has operated on a scale of prices, which, with the exception of the War period, has gone steadily downward. To make this enormous fortune in twenty-four years by simple manufacturing and selling entitles Mr. Ford to rank as the super-business man of all time. Even his worst enemies cannot deny him the crown. And yet, Mr. Ford has never borrowed from

banks. He does not believe in borrowing. He is outspokenly opposed to it. He has issued purchase money notes, but, if we may trust his own statement, he has never borrowed money and a 1931 statement of the Ford Motor Company showed a cash balance of $372,483,105, breaking all records for "idle" capital. Mr. Ford's aversion to borrowing did not extend to his dealers, who are heavy borrowers, and Mr. Ford has always helped them borrow by scattering his cash among the dealer's banks. For himself, however, he has always sold for cash and his example has been generally followed by other manufacturers.

Let us go to the opposite extreme. John D. Rockefeller and his associates are successful business men. One of the Vanderbilts stated publicly that the Standard Oil group were the "brightest" set of men he had ever known. In Mr. Rockefeller's *Random Reminiscences of Men and Events,* he describes his early struggles. He was a great borrower. He borrowed all he could get and asked for more. He had to buy and hold oil and the banks furnished the money. And yet to-day, as for many years past, the Standard Oil Companies formed out of the company founded by this great bank borrower, do not borrow from banks. An examination of their balance sheets shows enormous holdings of liquid assets, moderate amounts of accounts payable—they are all buyers of oil—but practically no items which can be interpreted as bank loans, or commercial paper. When a Standard Oil Company needs additional working capital it sells bonds or preferred stock. Banks would gladly lend at lower rates than have been paid, but the Standard Oil does not borrow.

The United States Steel Corporation, the Westinghouse Electric and Manufacturing Company, the General Electric, the American Locomotive, the Allied Chemical, International Paper, American Woolen, American Sugar, Anaconda Copper, American Smelting and Refining, nearly all the leading industrials and railroads are small borrowers.

Heavy borrowing among the large industrials seems to be confined to the meat packers, the fertilizer companies, the manufacturers of agricultural machinery and automobiles, and the large mercantile undertakings. Other companies, with few exceptions, show very small note-payable items among their liabilities. They provide working capital either out of profits or by the sale of securities.

In so far as we can derive a rule of practice or a tendency of policy from the practice of these large companies, it is that sufficient working capital should be provided out of earnings or from the sale of securities and that bank borrowing should be resorted to only in emergencies.

Decreasing Importance of Commercial Loans

I have already suggested in the deposit practice of the Ford Motor and other automobile companies, an explanation of their independence of banks. They exact cash payments for their cars from the retailer, who attends to the necessary financing of installment purchases. Sometimes, as with the General Motors Acceptance Corporation, the parent company promotes a company to assist the dealer, and the large cash balances which these companies carry are a great assistance in securing liberal treatment from banks. The tendency here, however, is a universal tendency. In building materials, including steel; in staple foodstuffs outside of canned goods, particularly in meat products; in all products of agriculture; in the metal industries; throughout the export trade; the tendency is to shorten the credit and secure the cash. Even the rapid growth of installment selling does not affect the producer. The burden is placed upon the distributor, as described above. The commercial bank, as a source of working capital for business, is rapidly losing ground. A recent computation showed that only 18 per cent of member bank loans were available for rediscount, that is to say, were classed as

commercial loans, and the percentage is steadily decreasing. Banks lend many billions on collateral, mortgages, bonds and stock, commercial products, real estate, installment contracts, but the old time commercial loan on single name or endorsed paper, based upon the reputation of the borrower, supported by his liquid assets, is losing ground. Business is now mainly done upon a cash or short credit basis, and it will not be long, from present appearances, before the commercial loan in bank portfolios will be reduced to a position of minor importance.

CHAPTER XXVIII

DISTRIBUTION OF PROFITS IN DIVIDENDS

CORPORATIONS exist and do business to produce dividends for their owners. After making the various deductions which have been indicated, the surplus profits belong to the stockholders, and if the company is successfully managed under conditions of ordinary good fortune, the stockholders will in time receive these surplus profits, directly or indirectly, in the form of dividends. A dividend is a payment of the profits of the company to its stockholders expressed in the form of a certain number of dollars per share, or, in the case of par-value stock, at a certain rate per cent.

Conditions Preliminary to Declaration of Dividends

There are two steps in the process of distributing profits to stockholders: first, the directors by a formal resolution declare that profits have been earned, after which by another resolution they declare a dividend. As a preliminary to the declaration of a dividend, the directors consider the following: (1) the cash or liquid assets of the company from which the dividends must be taken; (2) the prospects of business for the early future; (3) the ability of the company to obtain any funds which may be necessary for new construction by the sale of new stock or bonds. A company may be exceptionally prosperous without being able, on account of the rapid growth in its business which has locked up its cash assets in the form of accounts receivable, materials, etc., to pay out any portion of these

profits in dividends. A declaration of a dividend, under these circumstances, could be made only by selling stock or notes to obtain the money, and while this is sometimes done, as a common practice it is to be avoided. Again, the business of the company, at the time the matter of paying a dividend is considered, may be exceptionally prosperous, but the outlook for the future may be in doubt. When a revision of the tariff is in progress, for example, the companies whose earnings will be affected by any tariff changes under consideration are inclined to husband their resources and prepare for a possible shrinkage in earnings. A company whose business is rapidly expanding requires large amounts of new capital. It may not be desirable to raise this money by increasing capital stock. Any money required must come out of profits. The directors, under such conditions, would be cautious in increasing dividends.

Directors Control Declaration of Dividends

The law provides that the declaration of dividends is optional with the directors. They have authority to fix the amount of cash working capital which, in their judgment, the business of the corporation requires. Until they declare a dividend, there is no way in which the stockholder, except by his vote to displace one or more directors, can control their action. The directors are the trustees for the stockholders. They are given power to dispose of the funds of the corporation. No matter how large are the profits of the company, there is no way short of a proven charge of bad faith in which they can be compelled to declare a dividend. The stockholders can only participate in profits through the channel provided by law. Various attempts have been made to force a declaration of dividends, especially on preferred stock, on the ground that large profits have been earned, and that the stockholders were entitled to share in these profits. These attempts

have been generally unsuccessful.[1] The stockholder can invoke the aid of the courts to prevent the diversion of the company's funds to unlawful objects; he can restrain the officers and directors from paying to themselves exorbitant salaries; and he can prevent any improper use of the company's profits. As long, however, as the directors leave the company's profits in the treasury, and until they decide that a dividend shall be paid, the stockholder can obtain no share of these profits. His only remedy, in case he is dissatisfied with the management of the company, is to elect new directors or sell his stock and withdraw from the company. When a dividend has been declared, however, it becomes an obligation of the company, enforceable like any other debt.

Desirability of Stable Dividend Rate

The object which a conservative board of directors set before them is to establish a dividend rate which can be maintained under all conditions of earnings. The interests of the stockholder and the corporation unite in the demand that a rate of dividend once established shall be maintained. The stockholder desires a stable dividend because the value of a stock whose dividends, for example, run 6, 6, 2, 2, and 4, averaging 4 per cent for the five years, but irregularly distributed, will command a lower price than stock on which 4 per cent is paid every year. Investors, as distinct from speculators, although both elements are present in the minds of both purchasers of stock, desire stability in the income from their investments. The dividends which they receive go into their personal in-

[1] Of recent years the courts have grown more critical of large corporate surpluses. The Ford Motor Company was forced to pay a dividend on the ground that its surplus was too large for its business and should be distributed. Of course, the good faith of an abnormal accumulation can always be attacked, and it is difficult to rebut the charge. Exploitation of minority stock by the withholding of dividends is now very difficult if stockholders are alert and persistent in the defense of their rights.

come accounts; their expenditures and appropriations are adjusted to these receipts; a reduction or the passing of a dividend disturbs their calculations and unsettles their confidence in the company. As a result of this preference of the investor for stocks with a regular rate of distribution, the payment of regular dividends produces a higher and more stable value for such stocks. Stocks with regular dividends are worth more to sell and are also more valuable as collateral security.

A stable rate of dividend with its resulting higher and more permanent value is also of great advantage to the company. Many corporations, especially those whose receipts are not evenly distributed throughout the year, have occasion to borrow money in anticipation of income to meet obligations which mature before that income is received. Wages, interest, and taxes must be paid, and supplies purchased often before the proceeds of sales are received. In order that a corporation should retain a strong position with the banks, it is important that its stock should be maintained at a good figure. A high and sustained value for the stock of a company is ordinarily taken by the bank as evidence of its high credit. Of course, if this value is merely a recent marking up of stock exchange quotations, it may not have much weight with the bank officers, but if it is a steadily maintained quotation, and represents what investors really regard as the value of the stock, the banker considers it good evidence of the financial standing of the company applying for a loan. On the other hand, the fact that a stock sells at a low price is usually a warning to the banker to discriminate against the paper of the corporation issuing the stock, unless the notes are well secured by indorsement or collateral.

A settled investment value for its securities, which can be obtained only by stabilizing its dividend rate, also benefits the corporation because it makes it possible to procure, on more favorable terms, money for improvements and ex-

tensions. A prosperous company is a growing company, and is under frequent necessity of selling stock or bonds. The prices obtained for the new securities will depend upon the prices of those already outstanding. If the company issues bonds, a high value for the stock indicates that the interest on these bonds is amply secured by surplus earnings. This fact is prominently featured in advertisements of the merits of new bond and preferred stock issues. A recent offering of the preferred stock of the Curtis Publishing Company, for example, referred to the fact that the value of the common stock of the company was $147,000,000. If, however, the stock is selling at a low figure, the investor knows that the company which proposes to increase its debt has little security to offer its creditors aside from the property which the proceeds of the new bonds are to purchase. A low price of the stock indicates that the judgment of market observers is unfavorable to the company. The investor properly regards the past achievements of the corporation as the best assurance of its future prosperity. No matter how large the net earnings of a company may be at the time an increase of stock or bonds is made, the low market value of this stock which may result from an irregular dividend policy would be a warning that these large earnings would not be permanent. Under such circumstances, it might be difficult to obtain prices for these securities commensurate with their real value, based on earnings and assets.

So important is a constant rate of distribution of corporate profits considered, that even when increasing earnings enable the corporation to raise the rate of dividend, care is frequently taken to avoid any official statement, or even any implication from a statement, that the higher dividend rate is to be permanent. The method employed in such cases is to declare the "regular" dividend and then an "extra" dividend in addition. The increase is made in the form of the "extra" dividend as an intima-

tion to the stockholder that the directors are not yet fully convinced that they can add the amount of the "extra" to the regular rate, and that they prefer to wait developments before establishing the regular rate at the higher figure. After the "extra" dividend has been paid for several years, and if profits are maintained, the rate will be made regular.

Elements of Sound Dividend Policy

In order to maintain an even rate of distribution on its stock, the directors of well-managed companies are governed by the following rules:

1. To pay no dividends for a considerable period after the company begins operation.
2. To manage the expense accounts of the company in such a way as to reduce the fluctuations in surplus profits to the minimum.
3. To pay out, in any one year, only a portion of profits in dividends.

Payment of Initial Losses out of Earnings

Every new corporation is an experiment. Even though it operates in an industry where machinery, methods of administration, and product are standardized, and where the management can follow established models and methods, the extent of its success cannot be predicted. The number of unknown factors in every business situation is large; new laws to reduce profits, increases in taxation, unusual burdens imposed by the municipality in the way of public improvements, the incursions of competitors, changes in the tariffs, dangers of industrial depression, encroachments of organized labor, substitutions of new products or the invention of machinery to produce at lower cost—any or all of these influences may enter to disappoint the calculations of the directors. Furthermore, in most public flotations, there is some overvaluation of the

property purchased or constructed, and a corresponding element of inflation in the capitalization of the company. Even with the most painstaking care, mistakes of construction, location, or anticipation of demand may have been made. For example, the Ford Motor Company, after the announcement of its new car, was compelled to hold up production and to suffer a heavy loss, because some one in the organization had neglected to observe that the law in a number of states requires a separate emergency brake. The larger the enterprise, the more expensive are mistakes.

If the company is prosperous, these mistakes can be rectified, but the money with which these deficits are replaced comes from the profits of the company. Conservative directors will, therefore, refuse to pay out profits until the company has demonstrated its ability to earn its fixed charges, and to produce a surplus of profits out of which dividends can be paid.

Difficulties of Cumulative Preferred Stock

The issue of cumulative preferred stock seriously interferes with a conservative management of the company's income. When dividends are carried over and accumulated as a charge upon profits, preceding dividends on the common stock, fairness to the holder of common stock, as well as the usual necessity that a market should be made for new securities as quickly as possible, influences the directors to promptly begin the payment of dividends upon the preferred stock. In some cases, notably that of the United States Steel Corporation, the stock market situation influenced the directors to immediately begin payment of dividends on the common stock as well as on the preferred. For this, however, they were severely criticized. The position of the company during the early period of its existence was weakened by a policy of dividend payment which was generally believed to be unduly liberal. In December, 1903, the depressed condition of the steel trade

led to the suspension of dividends on the common stock of the United States Steel Corporation. The directors quickly took advantage of the opportunity to adopt a conservative dividend policy. Although the depression in the steel trade was only temporary, conditions approaching normal in the following year, the policy of investing large sums in plant and equipment which the directors would probably have been glad to follow from the first, had stock market considerations not proved controlling, was steadily adhered to. No dividends were paid on steel common until 1906, when a 2 per cent rate was established, raised a year later first to 3 and then to 4 per cent. Not until the autumn of 1909 was the rate advanced to 5 per cent. During this period from 1903 to 1909, the company earned $300,044,000 on its common stock and paid only $63,537,813 in dividends, the balance being invested in various reserves, and in building up a surplus on the balance sheet which, at the date of the 1927 annual report before the 40 per cent stock dividend stood at $363,044,913.62. As a result of this policy of investing profits in improvements, instead of paying them out in dividends, the United States Steel Corporation has eliminated all of the "water" in its original capitalization, and has placed itself in a strong position.

In 1914 and in 1931, evidencing the continuance of a conservative policy, a sharp reduction in profits influenced the directors to suspend common stock dividends.

The later policy of the United States Steel Corporation in sacrificing its dividends to its surplus, indicates the policy which every company whose financial situation permits should follow. In no other way can a corporation whose permanent earning power is doubtful, so certainly raise its securities to an investment position as by adherence to the policy of accumulating large reserves out of profits. In no other way can a corporation whose capitalization is excessive, compared with its earnings, justify

that capitalization save by "ploughing in" its profits, making the crop of earnings grow up into larger harvests of revenues.

A current illustration of the extreme conservatism which governs the dividend policy of well-managed corporations today is the action of the directors of the Colgate-Palmolive-Peet Company on July 5, 1932, in reducing the dividend on its common stock. The following statement explained this action to the stockholders:

> The company has, over a long period and by the expenditure of large sums of money, placed its brands in the forefront of the toilet soap, laundry soap, and toilet article industry. The management believes that active business and prosperity will in due course return to the country, and that as heretofore the public will seek the quality and reputation of those brands which have stood the test of time and with which they have become familiar.
>
> For this reason the company contemplates continuing its advertising campaign on a basis which will keep the position of the company in the industry, and the reputation of its advertised brands in the mind of the consuming public. As no one can foretell how long present conditions may last, the company intends to conserve its resources and maintain itself in a liquid position, believing that the carrying out of this program—even to the extent of reduced profits and dividends on its common stock—is the greatest ultimate service it can render to its stockholders.

Management of Expense Accounts in Relation to Dividends

The method of managing the expense accounts so as to reduce to a minimum fluctuations in the balance available for dividends has already been, in part, outlined in the preceding chapter. Cost of operation or production varies with the volume of business. An increase in the traffic of a railroad means more trains and more men to run the trains and repair the equipment. A falling off in business results in a reduction in operating expenses. The same is true of all other industries. The cost of operating the plant, aside from the cost of maintenance, fluctuates with

the amount of business done. The company's balance for dividends will not, on this account, fluctuate to the same extent as its gross earnings. Some compensation there will be in reduced operating expenses, on a reduced volume of business, for a decline in gross earnings.

Certain opposing or modifying considerations must be noted:

1. The growing tendency to substitute machinery for labor results in substituting fixed charges, taxes, interest, maintenance and depreciation on automatic machinery, for labor cost, especially unskilled labor cost, and so interferes with a reduction in operating expenses demanded by a decline in business. These "fixed" charges, once assumed, go on to the end, no matter what the volume of sales or the price of the product.

2. The growing scarcity of labor in many lines, notably in the building trades, for which the stringent immigration restrictions and trade union regulations are, in part, responsible, gives the employer pause when he considers a reduction in the working force. It may not be easy to get back his help when he needs them. They may find other employment. Furthermore, the tendency among plant executives is away from labor turnover. For example, the cost of training a bond salesman before he becomes productive is from $2,000 to $2,500 per year. This initial investment is lost, when he seeks other employment. Fixity of employment is the ideal of management. Wage cutting may be used to reduce expenses, but the great strength of organized labor, as well as labor scarcity, makes this method of reducing expenses of doubtful value. Organized labor may object to a shutdown or to half-time operation, but it will seldom carry its objection to the point of a strike. A reduction of wages by a modification of a contract with the Union will be resisted to the end.

3. The prevalence and rapid growth of integration, vertical consolidation as it is called, holds back the purchasing

agent from coming to the rescue of the sales department. By integration is meant the joining under one ownership of all stages in production. A steel corporation will own the iron and coal mines from which its supplies of material are drawn. A paper company will invest heavily in woodlands and water power. A sugar refining company will buy sugar plantations or a rubber manufacturer will go into the production of crude rubber. This integration is profitable because profits of raw material production do not enter into the price of the product. On the other hand, integration may be costly during times of falling prices.

In former days the rail maker found compensation for a decline in his price in forcing down the price of pig iron, and the blast furnace forced down, in turn, the price of ore and coke. A fall in prices of the final product was diffused over the entire series of antecedent operations. To-day, with ore mines, coal mines, coke ovens, blast furnaces, and steel plants under one ownership, a decline in the prices of rails, wire, sheets, and structural shapes, registers to almost its full extent in profits. There is no longer any supply industry to which the burden may be shifted. The only way out is to increase sales at lower prices.

With all these qualifications, when gross earnings decline, it is in the cost of operation that the principal opportunity for saving lies. Maintenance cost should be, and to an increasing extent is, a fixed charge. Incidental savings such as were mentioned in Chapter XXIV are of minor importance. The plant *must* be kept in repair if the business is to survive.

Skimping of maintenance is not permitted by good management. The same holds true though in a less degree of renewals and replacements. Machinery does not wear out so fast when it is not used, but it does wear out in time, and obsolescence is always at work. No well-managed

business neglects its current renewals, although extra appropriations for extraordinary replacements may be curtailed.

We come to the third rule of practice which governs the management of the income account with a view to the maintenance of a fixed rate of dividend—to pay out only a portion of profits—evidently an outgrowth of the first rule, to pay no dividends until the business is firmly established.

CHAPTER XXIX

DISTRIBUTION OF PROFITS IN DIVIDENDS (*Continued*)

Fluctuation of Earnings

The third rule which governs the dividend policy of well-managed companies is to pay in cash dividends only a portion of the income remaining in any year available for distribution to stockholders.

The earnings of a corporation are the coefficient of three factors: (1) the volume of traffic or sales; (2) the rate or price at which the business is done; (3) the cost of operation or production. A steel manufacturing company, for example, buys coke, pig iron, and limestone, and converts these products first into iron, and then into steel rails by purchasing the services of a number of employees, and maintaining a plant in good operating condition, and finally sells the product to the consumer. The formula for calculating the profits of this company is as follows: (*Receipts from sales*) — (*Cost of materials*) + (*Wages, salaries, and general expenses*) + (*Interest, rentals, and taxes*) + (*Cost of materials, machinery for replacements, and new construction charged to depreciation*). A variation in any of the items of expense, unless accompanied by corresponding variation of receipts, will result in a fluctuation of profits.

Stability of profits, under these circumstances, is an impossibility. The price of the product changes with the periodical fluctuations of demand. Fluctuations in the supply of labor, as well as the inefficiency of labor when employment is plentiful, makes labor cost uncertain. New inven-

tions and improvements may require the company to discard large amounts of machinery. Only the items of general expense and interest charges can be regarded as certain.

On the other hand, the receipts from sales are even more uncertain. The regular alternations of prosperity and depression, to say nothing of general breakdowns of demand, such as in 1921, or difficulties with organized labor, or advances of freight rates or tariff changes, or the intrusion of competing products; any one of these may come in to make a marked change, both in prices and the volume of sales. Here are two sets of profit variables, one disturbing calculations of expense, the other calculations of income. As a result of their interaction, every industry is subject to variations of profits. This fluctuation of profits is not the same for all industries, nor is the rate of change the same for every corporation in each industry. The distinction between industries, in respect to the relative stability of their profits, we shall have present occasion to examine. For the time being, it is sufficient to note that these profit fluctuations do exist, and that they must be reconciled with the necessity of paying a fixed rate of dividend, a rate which changes only to increase.

In view of these irregular earnings, it is impossible for corporation directors to pay out all their profits to stockholders without making dividends unstable and damaging the financial standing of the company. To reconcile the necessity for stable dividends with the fact of unstable profits, the directors must pay out only such a percentage of profits as will leave a margin over the dividend requirements, assuming profits to fall to the lowest point which, in all reasonable probability will be reached. Directors ascertain from their own experience, and from the experience of other companies similarly situated, what are likely to be the lowest earnings under the most unfavorable circumstances, and then fix its dividend rate well below that point. In order to maintain a rate of dividend, a

corporation should have its maximum dividend requirement always fall below its minimum earnings. If the opposite policy is adopted, large dividends will be paid out of large profits, small dividends out of small profits, and the value of the stock, as already explained, will be low and uncertain.

Percentage of Profits Available for Dividends

Our next question concerns the percentage of profits which directors, in the light of the desirability of a stable dividend rate, can safely pay to stockholders. The determination of this proportion in each case is a matter for the judgment of directors, having regard to the circumstances of their company. There are, however, certain broad considerations on the basis of which a classification of companies, with reference to the proportion of surplus earnings which can safely be paid to stockholders, can be made.

The percentage of average profits which can safely be paid to stockholders, varies with the regularity of its profits. A corporation, the difference between whose maximum and minimum profits over a period of years is 50 per cent, should pay out only half the proportion of annual earnings which can be safely distributed by another corporation whose earnings fluctuate only 25 per cent.

Factors Affecting Stability of Earnings

The stability of the earnings of a business depends primarily upon the steadiness of the demand for the product or service which it supplies. In manufacturing industry, this stability of demand is greatest in the production of the necessaries of life, such as milk, tobacco, and soft drinks, and it declines as the article becomes less indispensable to the consumer. The percentage of average earnings which a lace or glove manufacturing company, for example, can safely pay to its stockholders is far less than the per-

centage which a sugar or oil company can pay. The fluctuations in the demand for all goods used in production, including machinery and materials, are also great. Iron and steel products, for example, are purchased that the buyer may make a profit by using these commodities in further production. Such articles as lathe, steel rails, and structural steel are usually bought by producers to make a profit by using them or reselling them. The strength of the demand for iron and steel depends, therefore, upon the movement of profits, since these things are purchased to make profits.

Demand for production goods is also related to the investment or speculative demand for securities. For example, the cement industry has profited because of the heavy demand for public bonds, state and municipal, since the War, since it has been easy from this source to provide funds for public improvements into whose construction concrete largely enters.

As a general principle, rising prices mean advancing profits to the industries concerned, and falling prices mean declining profits. The reason for this is that costs of production move more slowly than prices of the product, since they contain certain elements such as wages and interest, which change very slowly. Industries are, moreover, so closely joined together in the relations of producer and consumer that an increase in the prices and profits of one industry is quickly passed to the others. When the price of wheat is rising, the farmer's profits go up, and with them his demand for agricultural implements, fertilizer, cement, lumber, barbed wire, and nails. When the price of wheat falls, these purchases are postponed to a more convenient season. Rising prices increase the volume of traffic and the earnings of the railroads, and the prices of their securities, enabling them to raise money for extensions and improvements, which improves the demand for a great variety of articles entering into the construc-

tion and equipment of railroads. On the other hand, when prices are falling, and the volume of business shrinks, railway earnings decline, the security market will take only high-grade bonds, the railroads have no margin in their earnings to make improvements, and their securities cannot be sold to advantage. It is then necessary to stop their extension and improvement work, and to curtail their expenditures for materials. The same influence determines the demand for the products of the metal industries, and also the demand for such articles as coal and lumber which are mainly purchased for profit and not for the personal consumption of the buyer. The demand for these articles fluctuates widely and often wildly, corresponding to the alternations of business prosperity and business depression. Industries which produce production goods, therefore, if properly managed, will be very conservative in their distribution of profits to stockholders. In this connection, let me point out a striking divergence between theory and practice. In theory, strong companies with ample funds and good credit should expand their plants in dull times when money and labor costs are low, so that they will be ready for the new business when it comes. In practice, the opposite course is followed. In dull times, capital and maintenance expenditures are reduced to the smallest possible amounts, while when business revives, large outlays for new construction are made and arrearages of maintenance made up. Business men, like other men, live from day to day. They deal with situations as they find them, and they are not inclined to base their outlays on prophetic views of the future. Great geniuses like E. H. Harriman prepare for the future, but Mr. Harriman died in 1909.

The object of all business enterprise is to gain some differential advantage, to develop some product, some form of organization, some trade-mark or slogan, some sales plan which their competitors do not possess, which will

give those who possess them an advantage in competition.

Standardization of product is directly opposed to profit. When standardization is achieved, competition at once breaks out. Differential advantage, the source of profits, disappears, and goods are produced with little regard to profit margins. Only by keeping ahead of the procession can a manufacturer maintain his differential advantage, and one of the most effective methods of securing such a favored position is to diversify and improve the line of products. Recent business history abounds with illustrations. Cigarette manufacturers bring out a cellophane-wrapped package, and for a few weeks gain a marked differential advantage. A tire manufacturer announces a puncture-proof product. His gains at the expense of his rivals are large until his rivals duplicate his achievement. By that time he is out with a new tread which restores, for a brief time, his advantage.

The DuPont Company, out of cotton linters, manufactures a new wrapping material, cellophane. This displaces waxed paper and tin foil, for many uses, and also introduces wrapping to many products which have never been wrapped before. From two sources, shifting of old demand and development of new demand, the DuPont Company makes large profits from cellophane. This year, however, the Eastman Kodak Company enters the cellulose wrapper field and threatens the DuPont Company for the first time with effective competition. The heyday of profits in this line is over.

The General Electric Company, recognizing the trend of the times, is invading on a large scale the field of household electrical appliances, with new and improved devices. The electric refrigeration, heat control, radio, washing machines, electric ranges, oil burners, electric water heaters, the electric eye, and, last of all, air conditioning equipment, all on new and improved lines and backed by ample resources of money and skill, show the determination of this

progressive company to accommodate its production to the trend of consumers' demands in the direction of greater convenience and efficiency.

On the other hand, there are many illustrations of losses arising from failure to diversify. The Westinghouse Electric and Manufacturing Company did not diversify its activities in the field of household appliances until recent years, and then only with great caution. It centered its activities on the production of generating and transmission electrical machinery. With the depression, the demand for industrial electrical products almost disappeared, while the sales of household appliances were well maintained, and in some cases, *e.g.*, refrigerators, actually increased.

The gross sales of Westinghouse in 1929 were $216,364,568, and in 1931 were $115,393,082, a decrease of 47 per cent, while net income decreased from $27,062,611 to a net loss for 1931 of $3,033,209.

General Electric sales in 1929 were $415,338,094 and in 1931 were $263,275,255, a decrease of 36.5 per cent. Net profits from these sales declined from $67,289,880 to $40,956,996, a decrease of 40 per cent. In the lines which the General Electric Company had developed, the profit per unit of product is much larger than in industrial electrical equipment. On each dollar of sales in 1931 the General Electric Company made 12 cents, while the Westinghouse Company lost 2.6 cents. A plainer illustration of the importance of diversification as a means of maintaining profits could not be required.

The United States Steel Corporation, for many years mainly a producer of raw materials for other industries, has recently made a substantial investment in cement plants through its acquisition of the Atlas Cement Company, acquired January 1, 1930, and also purchased the Oil Well Supply Company, manufacturers of pipe fittings for the oil industry, in October, 1930, through an exchange of stock.

Even when forward integration is not resorted to, the company's line grows constantly larger. International Harvester, for example, manufactures binders, combine harvesters, mowers, rakes, hay presses and loaders, corn binders, shredders, pickers, shellers, cultivators and planters, cotton pickers and planters (not yet fully developed), potato cultivating machinery, milking machines, cream separators, tractors, and a full line of trucks. The products of this company cover the entire field of agricultural machinery.

Lest it be gathered that diversification of product is the only gate to differential advantage, it will be well to point out that there are other means to the same end. Opportunity always exists for absolute superiority of product, for the device of new uses for old products, better and cheaper means of production, more profitable uses for by-products, for the simplification of marketing by the elimination of the middle man, the perfection of a new and improved sales technique. It is in such channels as these, in recent years, that we have seen striking illustrations of the amazing fecundity of human ingenuity. It is safe to say that there will always be profitable opportunities for business men who have alert minds, a zeal for work, and who are not bound by tradition. It is the routineer who gravitates toward standardization, and the elimination of profit by direct competition.

From the influence of competition, the profits of the railway industry are to a large extent protected. The railway company enjoys a natural monopoly. After the territory through which its lines pass has been fully settled, the building of competing lines becomes very difficult. An important deterrent to new railroad construction is the increasing cost of terminals. A striking illustration of this fact was the enormous expenditures of the, then, Gould interests to put a line into Pittsburgh, which it is claimed cost them $30,000,000, and which, because of their inability

to connect with the leading industries of that city, and also because of the absence of an eastern outlet which would enable them to compete for the bulk of the tonnage, was long unsuccessful. Even when competition exists between the larger cities, the local traffic is generally free from this influence, and competition for through business, while effective in maintaining lower rates between competitive points, is nevertheless faithfully regulated by uniform agreements. These agreements are observed, presumably because the decline of traffic during periods of depression is not so severe as to start a fight for existence between railroads, and also because all forms of secret rate-cutting, rebating, and discriminations are now prohibited by a Federal criminal statute, which has been rigidly enforced in recent years.

New Forms of Competition

By the Transportation Act of 1920, railway consolidation, once under the ban of the law, is now enjoined. In 1902, for example, a consolidation of the Great Northern, Burlington, and Northern Pacific railroads was forcibly broken up by the Federal Government. Under the Transportation Act, with the cordial approval of the national administration, this consolidation is now under consideration by the Interstate Commerce Commission.

While railway competition, so far as it relates to speed and character of service, still exists, competition in rates has practically disappeared.

Other forms of competition have harassed the railroads in recent years. The Panama Canal, for example, on which nearly $25,000,000 of tolls was collected in 1927, is charged with partial responsibility for the collapse of the Chicago, Milwaukee & St. Paul. Every railroad has lost traffic to the automobile, the motor bus and the motor truck. On the whole, however, the railroads have not greatly suffered, and their freight traffic is steadily advancing. Rail-

way transportation is in such universal demand that railway earnings seem to be immune from serious disturbances.

In the field of manufacturing and trading, while competition within the same industry has been checked, both by the influence and example of large companies and by the growing influence of trade associations, with the cultivation of friendly personal contacts, and dissemination of trade information, competition between products and between different stages in the process of production and distribution was never more rampant or menacing. The chain store undersells the corner grocery. The food manufacturer jumps over the jobber and goes direct to the retailer by nationally advertising his product to the consumer. The jobber in turn is forced into manufacturing, on the one hand, and retail distribution on the other. Commodities are savagely fighting each other. Concrete is displacing steel. Satin and leather are competing for the favor of the manufacture of women's shoes. Rayon is fighting silk. Competition is virulent

between slate, wood, asbestos, copper, zinc and asphalt for roofing; between meat and the so-called health diets; between butter and margarine; between fuel oil and coal; between electric refrigeration and ice; between the movies, the theater, the radio, and the book; between steel and wood in furniture; between the magazine, the newspaper, and the bill-board for advertisers.[1]

Each new form of consumption goods or service is forced upon the public by the expenditure of enormous sums in advertising. Instances can be multiplied, the phenomenal success of Listerine, of the Gillette Safety Razor, and of Fleischman's Yeast. The buying public is cajoled and bullied into buying. The great stream of demand which once flowed smoothly as the Mississippi, rising and falling with the fluctuations of prosperity, but changing its channel very slowly, now resembles the whirlpool rapids of

[1] O. H. Cheney, in the *Manufacturers' Record*, January 27, 1927.

the Niagara River, where cross currents, eddies, and backwashes whirl and shift with bewildering rapidity.

Apportioning Earnings between Surplus and Dividends

What rule or principle to guide directors in the percentage of profits which can safely be paid out in dividends can be derived from the situation here outlined? Standard railroad practice established by the Pennsylvania for many years was one dollar for dividends and one dollar for surplus, or rather for the property. This rule applies to railroads and utilities operating under conditions of natural monopoly. For manufacturing, mining, merchandising, shipping, construction, and financial companies, which are fairly wallowing in competition, however, it will not serve. No rule will serve. The directors of such concerns must go forward in fear and trembling, keeping dividends to the minimum that the clamor of stockholders will allow. Mr. Ford, out of $924,000,000 of profits, in twenty-three years, paid out about $100,000,000 in dividends, so far as the record is available. If the dividends of 1919, the last year when Mr. Ford had to divide with any one, had been continued to 1926, the total amount would have been about $250,000,000, about 27 per cent of his profits for the entire life of the company. These profits, with the exception of 1917, when the plant was largely turned into war service at little profit, steadily increased. If we take Mr. Ford's practice as standard, and Mr. Ford is a conservative man, the ratio of one dollar of dividends to four dollars of profits can be established as a safe working rule. Anything above this, in the present confusion of industrial competition, savors of extravagance.

CHAPTER XXX

DISTRIBUTION OF SURPLUS

Definition of Surplus

We must remember that the surplus of a company is not a special deposit in a bank. It is not a fund of securities held at the disposal of the stockholders. The surplus is a bookkeeping entry, representing the excess value of assets over liabilities. It is not a fund of securities, or a special deposit to the credit of a corporation, or a separate mill or mine. It is merely a sum which balances the corporation's assets with its liabilities.

This surplus is sometimes very imposing. The Atchison, for example, reported for 1929 a surplus of $314,460,358; the Great Northern, $126,861,795; the Pennsylvania Railroad, $230,834,073; the United States Steel Corporation, $434,711,118; the General Electric, $171,200,883; the Allied Chemical, $196,205,745. These are large totals. But when we turn to the assets side of the balance sheets, we do not find any corresponding amount which can be distributed. For example, the current assets of the Atchison, at the same time were $82,171,105; of the Great Northern, $54,215,591; of the Pennsylvania, $110,307,034. Even the United States Steel Corporation had only $562,232,506. Evidently these surpluses are not distributable. They are simply sums of value invested in the business and representing the accumulation of profits.

Elbert H. Gary described this surplus of the Steel Corporation with singular aptness and simplicity:

In this connection, there are many things to be considered which may be overlooked by a few. They read of a surplus of, we will say, $490,000,000, or perhaps a little more, and assume that this is all cash, or assets quickly convertible into cash, like the surplus of a bank. They seem to forget that only the smaller part is available cash; that the larger part is in inventories of raw materials like iron ore, coal, coke, stone, and other supplies, semi-finished and finished materials sold or unsold, unfinished buildings or other structures; receivables in course of collection; cash held in banks to meet maturing obligations, including purchases made but not delivered, such as cars, engines, ships, machinery, equipment of various kinds, etc., etc., and, finally, that a large part, if not the larger part, of the surplus has been permanently invested in plants and properties.

Relation of Surplus to Dividend Rate

What now is the relation of this surplus appearing on the balance sheet to the rate of dividend? May it be drawn upon in case of emergency to make up a deficit in income? May it be distributed in large amounts as special dividends to stockholders?

An illustration of the uninformed view of surplus is the published statement of Mr. Wilbur LaRoe, a former Interstate Commerce Commission examiner, used in the advanced rate hearings of 1931. Mr. LaRoe seriously argued that since the combined surplus of the Class I railroads aggregated $3,500,000,000, they were in no need of relief. By inference, Mr. LaRoe would have had the railroads pay their interest and rentals out of their cuts, fills, and ballast.

The surplus is merged in the assets not to be segregated or separately identified. It may, however, serve as a fund out of which deficits in the amount necessary to pay the regular dividend may be made up, either by direct withdrawal or by borrowing. The surplus may also, from time to time, be directly distributed to stockholders, in a lump sum, as a special dividend. These various methods of utilizing the surplus we have now to examine.

Reduction of Working Capital

The surplus of a corporation may be used as a source of dividends to its stockholders, aside from its service in increasing the net earnings of the business, in the following ways:

Temporary Reduction of Working Capital

By the reduction of business, the amount of cash in the company's treasury is increased as receivables are collected and the amount of new receivables is reduced. The company now has more cash than it needs and if the depression in business promises to be of long duration, the directors may decide to cheer up the stockholders with a special cash dividend.

Distribution of Assets No Longer Needed

The first method of distributing surplus directly to the stockholders is used when a company may have acquired in the course of its business certain assets which it no longer needs, such as coal mining or express companies, or land companies. The stocks representing these concerns may be held in the treasury of the parent company, and the dividends received on these stocks may be added to the other income of the parent company, and merged into its general surplus available for distribution. In case it is expedient or convenient for the corporation to divest itself of the control of the properties, the stocks or bonds issued by the subsidiary companies may be distributed to the stockholders of the parent company as a special dividend.

An illustration of this method is furnished by the distribution of the Great Northern Ore certificates to the stockholders of the Great Northern Railway Company. Certain iron-ore lands in Minnesota had been acquired in the interest of the Great Northern Railway by James J.

Hill, then its president, and his associates. These properties, aggregating about 60,000 acres, were located in the Missabe district of Minnesota. They were controlled by the corporation known as the Lake Superior Company, Ltd., controlled by the Great Northern Railway. The properties were transferred in the autumn of 1906 to James J. Hill, Louis W. Hill, and E. T. Nichols, as trustees, and 1,500,000 shares of permanent beneficial interest in the trust were issued in December, 1906, to the Great Northern stockholders. In August, 1906, a lease was executed to the Great Western Mining Company, guaranteed by the United States Steel Corporation, covering 39,295 acres of this land. The Great Western Mining Company agreed to extract 750,000 tons of ore in 1907, with an increase of 750,000 tons annually, until a maximum annual extraction of 8,250,000 tons was reached in 1917. The lease fixed the net royalty for each ton of ore delivered at the dock by the Great Northern at 85 cents, and, after deducting 80 cents per ton as freight to the railroad company for transporting the ore, the balance was distributed to the holders of trust certificates at least once a year. These certificates were immediately distributed by the trustees to the Great Northern stockholders as a special dividend. This lease has since been terminated.

It had long been the policy of the Great Northern to keep its dividend at 7 per cent. Had these ore certificates been placed and held in its treasury and added to the regular dividends, this rate would have been exceeded. The lease protected the railway company in the transportation of the ore to be mined under the lease. It could, therefore, without danger of losing control of this traffic, distribute the certificates of beneficial interest in the lease as a special dividend to the stockholders. This would have been a direct distribution of its surplus by the Great Northern Railroad Company.

The General Electric Company in 1925 distributed to its

stockholders the stock of its subsidiary, the Electric Bond and Share Company, a company organized to furnish business to the General Electric by promoting various forms of electrical enterprise where the construction, present and future, could be secured to the General Electric. These connections no longer being needed, the distribution was duly made and the surplus of the General Electric was reduced by the book value of the shares of the Electric Bond and Share Company.

The Dividend Reserve Fund

Second, a portion of the surplus may be put into a dividend reserve fund, withdrawn from the working capital of the business, and so invested that it can be drawn upon in times of deficiency of revenue to pay dividends. Unless the dividend reserve fund is so built up, the assets of the company cannot be directly utilized to make up a deficiency in earnings. A railroad company, for example, has invested its surplus in equipment, or in improvements to its line, or in securities of terminal or marine corporations whose operations are necessary to its business. It also carries a certain cash balance. It cannot sell any of these properties or assets, or distribute its cash working capital without impairing its efficiency. The investment of surplus funds in the business of the corporation merges and identifies them with the general assets of the company, which are used for its general corporate purposes, and which, unless the stockholders decide to wind up its affairs, pay its debts and divide the balance, are not available for distribution. If, however, a company maintains a dividend reserve fund, it may use its surplus to make up deficiencies in revenue.

When a dividend reserve fund is established, amounts are withdrawn from the profits of the business, and invested in securities which are held as investments, and which do not represent the control of properties necessary

to the company. In a year of small profits, a portion of these securities can be sold, or they can be pledged as security for a loan, and the regular dividend can thus be paid. This plan is, in effect, the averaging of payments out of surplus over a period of years—the same principle as that followed by many companies in insuring their own plants where sums larger than anticipated fire losses are put into a fund out of which extraordinary losses are paid.

An illustration is furnished by the Cunard Company, which over the twenty years ending 1902, out of £4,650,380 of profits earned, paid only 18.8 per cent to the owners of the company and added 81.2 per cent to the various reserves which the company maintained. A large amount of this money withheld from the stockholders was invested in good securities, and during four bad years, from 1892 to 1895, these reserves were drawn upon for dividends. Of the £64,000 which was paid out to stockholders during these years, £55,000 came from the reserves.

The dividend reserve fund as a means of financial stability can be endorsed without qualification although it is not yet generally adopted. The surplus of a company is properly considered as a portion of its capital, so are its various reserve funds. These are owned by the company. They do not belong to the stockholders. A dividend reserve fund is, however, in a peculiar sense the property of the stockholders. It represents money which the directors could properly have paid them in past years, but which has been retained to make up occasional deficiencies in revenue.

Companies may draw upon their surplus either directly or by borrowing to make up deficiencies in revenue for dividend payment. American Locomotive and Baldwin Locomotive Works are illustrations of resort to surplus to pay dividends. These companies, however, are subject to extraordinary fluctuations in earnings. The ordinary prac-

tice is not to pay a dividend which is not earned for the period.

The directors may well hesitate, and are, in fact, very reluctant to pay increased dividends out of surplus. They can, however, with a clear conscience draw down the dividend reserve fund to make up shortages, since that is the purpose of establishing the fund. Stockholders are always dissatisfied when a dividend is passed or reduced. They are likely to demand that, with a large surplus, the rate should be maintained. When a dividend reserve fund is established, the stockholder knows just how much is available for him, and pays less attention to the surplus as his property, which the surplus is not.

Methods of Distribution of Surplus

With the exception of the three methods described—temporary reduction of working capital, distribution of assets for which the corporation has no further use, and payment of dividends out of a dividend reserve—direct distribution of the surplus is not possible. The surplus is an indistinguishable part of the property of the company, merged into general assets, increasing, in time, if the amounts carried to the credit of surplus have been wisely invested, the annual profits in which stockholders participate, but it is not available as a fund for direct distribution in dividends. The company cannot properly sell any part of its plant to pay a dividend or sell any stock held in order to control subsidiary corporations, or impair its working capital to make a distribution to stockholders. The distribution of the surplus must usually be made, if at all, by increasing liabilities rather than by reducing assets, by the indirect, rather than the direct method.

The surplus is the difference between assets and liabilities, appearing as a balancing item on the liability side of the balance sheet. This surplus can be disposed of either by distributing the assets or by increasing the liabili-

ties. In either case, the difference between assets and liabilities is reduced. If the corporation issues stock or bonds directly to stockholders without receiving any cash equivalent, or sells these securities and pays out the proceeds as special dividends, it may, without impairing its general assets or its efficiency, distribute surplus to its stockholders.

Stock Dividends

The usual method of distributing the surplus—although if we understand the surplus as consisting of assets, it is really no distribution, but merely a reduction—is to declare a stock dividend. The method of doing this, and the reason for doing it are both shown in the following resolution of the directors of the American Tobacco Company:

Whereas, in the judgment of this board, it is to the interest of this Company to capitalize a substantial amount of its surplus so that it may permanently remain invested in the business, to accomplish which purpose the most convenient method is by the distribution of a stock dividend among its stockholders out of the authorized and unissued Common stock "B" of the Company.

Therefore Be It Resolved (1) That there be and hereby is declared a stock dividend on the Common Stock and Common Stock "B" of this Company of 75%, payable in Common Stock "B" at par on August 1, to holders of record July 15.

(2) That on August 1 there be transferred from surplus to capital account an amount equal to 75% of the total par value of Common Stock and Common Stock "B" outstanding July 15, 1920, and certificates of Common Stock "B" equalling at par said 75% or warrants therefor, shall on August 1 be distributed pro rata among the holders of record July 15 of said Common Stock and Common Stock "B."

The business reason in most cases of stock dividends is, as in the foregoing illustration, the desire of the directors to retain cash in the business. If they distribute a cash dividend and simultaneously offer to their stockholders an

amount of stock equal to the dividend, it is certain that all the stock will not be taken. Many stockholders may have other uses for the dividend than to invest it in new stock of the company paying the dividend. If, on the other hand, the directors hold their cash, and distribute stock, they are in the same position as if *all* the stockholders under the first supposition had received their cash dividend and had endorsed the checks over to the corporation in payment for new stock.

A stock dividend is sometimes described picturesquely, although incorrectly, as a forced loan from the stockholders. In this view, the surplus belongs to the stockholders, and the directors, instead of giving them a part of it, give them a stock dividend in cash.

Stock dividends are often declared to take up accumulations of preferred dividends. These unpaid dividends are not, however, liabilities of the corporation, although it is customary in such cases, in order to clear the way for dividends on the common stock, that the preferred stockholders should surrender their claims to back dividends.

Another, and at present a controlling reason is the bearing of the stock dividend upon the surtax upon individual incomes. Out of the heavy business of the five years ending 1926, corporations, with few exceptions, took enormous profits; and these profits are in many cases in liquid form, available for immediate distribution. Before the imposition of heavy income taxes, large cash disbursements out of these profits would have been made. These corporations, however, are for the most part controlled by rich men. To men in this position the payment of a large cash dividend, which is added to their taxable income, is a calamity. Suppose, for example, that a man has $60,000 income derived from $500,000 of stock paying 6 per cent dividends, plus a salary of $30,000. In addition to the normal tax of ½ per cent on the first $4,000 of taxable income, and 2 per cent on the next $4,000 and 4 per cent

on the excess over that amount, paid on the $60,000 income, less a credit of $450 on earned income, the stockholder pays a surtax of $4,400. Now assume that the corporation has a large cash surplus which it desires to distribute. Our stockholder's share will be $40,000 in addition to the $60,000 which he is now receiving, making his total income $100,000. On this amount his total surtax will be $11,660. In other words, $7,260 of the $40,000 of the special dividend will be paid out in surtax.

Now suppose that instead of paying out $40,000 in cash to the stockholder, the corporation issues to him $40,000 of 6 per cent stock. His income is increased by only $2,400, the standard rate of return on $40,000, and his surtax is only increased to $4,784. In other words, by the first method he has only $32,740 to invest, which at 6 per cent will bring him in $1,964.40 per year, while from the return on his stock dividend he will receive $2,400, gaining $435.60 in annual income by substituting the stock dividend for the cash dividend.

With men of great wealth, who are in receipt of enormous taxable incomes, and whose surtaxes run to 25 per cent, large cash distributions are out of the question. Indeed, it is a striking tribute to their honesty and fairness to the stockholders of the companies which they control that their dividends are not reduced, or indefinitely deferred.

The exclusion of stock dividends from incomes by the decision of the Supreme Court in the Macomber case was rightly considered a most valuable concession to the men of large incomes, although, of course, no such consideration influenced the minds of the majority. The essential parts of this opinion follow:[1]

On January 1, 1916, the Standard Oil Company of California, a corporation of that state, out of an authorized capital stock of $100,000,000, had shares of stock outstanding, par value $100

[1] Eisner *vs.* Macomber, No. 318. Decided, March 8, 1920.

each, amounting in round figures to $50,000,000. In addition, it had surplus and undivided profits, amounting to about $45,000,000, of which about $20,000,000 had been earned prior to March 1, 1913. In January, 1916, the directors decided to issue shares sufficient for a stock dividend of 50 per cent of the stock, and to transfer from surplus account an amount equivalent to such issue.

Myrtle Macomber, being the owner of 2,200 shares of the old stock, received certificates for 1,100 additional shares, of which 18.07 per cent, or 198.77 shares par value $19,877, were treated as representing surplus earned between March 1, 1913, and January 1, 1916. She was forced to pay, under protest, a tax imposed under the Revenue Act of 1916, based upon a supposed income of $19,877 because of the new shares; and she brought action against the Collector to recover the tax. In her complaint she contended that in imposing such a tax the Revenue Act of 1916 violated those sections of the Constitution of the United States requiring direct taxes to be apportioned according to population, and that the stock dividend was not income within the meaning of the Sixteenth Amendment. The Supreme Court decided against the Collector of Internal Revenue.

We are constrained to hold that the judgment of the District Court must be affirmed because a reëxamination of the question, with the additional light thrown upon it by elaborate arguments, has confirmed the view that the underlying ground of that decision[2] is sound, that it disposes of the question here presented and that other fundamental considerations lead to the same result.

The fundamental relation of "capital" to "income" has been much discussed by economists, the former being likened to the tree or the land, the latter to the fruit or the crop; the former depicted as a reservoir supplied from springs, the latter as the outlet stream, to be measured by its flow during a period of time. For the present purpose we require only a clear definition of the term "income," as used in common speech, in order to determine its meaning in the Amendment; and, having formed also a correct judgment as to the nature of a stock dividend, we shall find it easy to decide the matter at issue. . . . "Income may be defined as the gain derived from capital, from labor, or from both combined, provided it be understood to include profit gained

[2] Towne *vs.* Eisner, 245 U. S. 418, where it was held that a stock dividend made against surplus earned prior to January 1, 1913, was not taxable as income.

through a sale or conversion of capital assets." . . . Brief as it is, it indicates the characteristic and distinguishing attribute of income essential for a correct solution of the present controversy. The Government, although basing its argument upon the definition as quoted, placed chief emphasis upon the word "gain," which was extended to include a variety of meanings; while the significance of the next three words was either overlooked or misconceived. *"Derived—from—capital";*—"the *gain—derived—from—capital,"* etc. Here we have the essential matter; *not* a gain *accruing to capital,* not a *growth* or *increment* of value *in* the investment; but a gain, a profit, something of exchangeable value *proceeding from* the property, *severed from* the capital however invested or employed, and *coming in,* being "derived," that is, *received* or *drawn by* the recipient (the taxpayer) for his *separate* use, benefit and disposal;—*that* is income derived from property. Nothing else answers the description.

The same fundamental conception is clearly set forth in the Sixteenth Amendment—"incomes, *from* whatever source derived" —the essential thought being expressed with a conciseness and lucidity entirely in harmony with the form and style of the Constitution.

Can a stock dividend, considering its essential character, be brought within the definition? To answer this, regard must be had to the nature of a corporation and the stockholder's relation to it. We refer, of course, to a corporation such as the one in the case at bar, organized for profit, and having a capital stock divided into shares to which a nominal or par value is attributed.

Certainly the interest of the stockholder is a capital interest, and his certificates of stock are but the evidence of it. They state the number of shares to which he is entitled and indicate their par value and how the stock may be transferred. They show that he or his assignors, immediate or remote, have contributed capital to the enterprise, that he is entitled to a corresponding interest proportionate to the whole, entitled to have the property and business of the company devoted during the corporate existence to attainment of the common objects, entitled to vote at stockholders' meetings, to receive dividends out of the corporation's profits if and when declared, and, in the event of liquidation, to receive a proportionate share of the net assets, if any, remaining after paying creditors. Short of liquidation, or until dividend is declared, he has no right to withdraw any part of either capital or profits from the common enterprise; on

the contrary, his interest pertains not to any part, divisible or indivisible, but to the entire assets, business, and affairs of the company. Nor is it to the interest of an owner, since the corporation has full title, legal and equitable, to the whole. The stockholder has the right to have the assets employed in the enterprise, with the incidental rights mentioned; but, as stockholder, he has no right to withdraw, only the right to persist, subject to the risks of the enterprise, and looking only to dividends for his return. If he desires to dissociate himself from the company he can do so only by disposing of his stock. . . .

In the present case, the corporation had surplus and undivided profits invested in plant, property, and business, required for the purposes of the corporation, amounting to about $45,000,000, in addition to outstanding capital stock of $50,000,000. In this the case is not extraordinary. The profits of a corporation, as they appear upon the balance sheet at the end of the year, need not be in the form of money on hand in excess of what is required to meet current liabilities and finance current operations of the company. Often, especially in a growing business, only a part, sometimes a small part, of the year's profits is in property capable of division; the remainder having been absorbed in the acquisition of increased plant, equipment, stock in trade, or accounts receivable, or in decrease of outstanding liabilities. When only a part is available for dividends, the balance of the year's profits is carried to the credit of undivided profits, or surplus, or some other account having like significance. If thereafter the company finds itself in funds beyond current needs it may declare dividends out of such surplus of undivided profits; otherwise it may go on for years conducting a successful business, but requiring more and more working capital because of the extension of its operations, and therefore unable to declare dividends approximating the amount of its profits. Thus the surplus may increase until it equals or even exceeds the par value of the outstanding capital stock. This may be adjusted upon the books in the mode adopted in the case at bar—by declaring a "stock dividend." This, however, is no more than a book adjustment, in essence not a dividend but rather the opposite; no part of the assets of the company is separated from the common fund, nothing distributed except paper certificates that evidence an antecedent increase in the value of the stockholder's capital interest resulting from an accumulation of profits by the company, but profits so far absorbed in the business as to render it impracticable to separate them for withdrawal and distribution. In

order to make the adjustment, a charge is made against surplus account with corresponding credit to capital stock account, equal to the proposed "dividend"; the new stock is issued against this, and the certificates delivered to the existing stockholders in proportion to their previous holdings. This, however, is merely bookkeeping that does not affect aggregate assets of the corporation or its outstanding liabilities; it affects only the form, not the essence, of the "liability" acknowledged by the corporation to its own shareholders, and this through a readjustment of accounts on one side of the balance sheet only, increasing "capital stock" at the expense of "surplus"; it does not alter the pre-existing proportionate interest of any stockholder or increase the intrinsic value of his holding or of the aggregate holdings of the other stockholders as they stood before. The new certificates simply increase the number of the shares, with consequent dilution of the value of each share.

A "stock dividend" shows that the company's accumulated profits have been capitalized, instead of distributed to the stockholders or retained as surplus available for distribution in money or in kind should opportunity offer. Far from being a realization of profits of the stockholder, it tends rather to postpone such realization, in that the fund represented by the new stock has been transferred from surplus to capital, and no longer is available for actual distribution.

The essential and controlling fact is that the stockholder has received nothing out of the company's assets for his separate use and benefit; on the contrary, every dollar of his original investment, together with whatever accretions and accumulations have resulted from employment of his money and that of the other stockholders in the business of the company, still remains the property of the company, and subject to business risks which may result in wiping out the entire investment. Having regard to the very truth of the matter, to substance and not to form, he has received nothing that answers the definition of income within the meaning of the Sixteenth Amendment.

Another feature of stock dividends deserves notice. These disbursements of shares are frequently made when profits have reached a sum which makes possible an advance in the dividend rate. A company may be paying 6 per cent and earning 18 per cent, often making all present deductions from income. An advance to 9 per cent would

be safe and proper. Instead of advancing the rate, however, a 50 per cent stock dividend is declared and the dividend is maintained at 6 per cent. The owner of 100 shares, who received $600 in annual dividends, now owns 150 shares on which $900 annual dividends is paid, leaving the rate the same, but increasing the amount paid. The main purpose of this method is to keep down the market value of the stock, which would, on a 9 per cent basis, rise to undesirable heights. High-priced stocks represent a smaller total value because the demand for such shares is narrower than when a 6 per cent rate is paid. The reason for the higher total market value of moderate-priced shares over high dividend, high-priced shares, can be understood by comparing the market value of a dwelling house costing $50,000 with the standard $6,000—$7,000 workingman's dwelling. On a forced sale, a much higher percentage of the cost of the low-priced houses can be realized because there are many buyers for this grade of houses, while the demand for expensive houses is limited. Both for sale and for collateral, moderate-priced shares are better values.

We may note finally the difference between a stock "split-up" and a stock dividend. In the first case, two or three shares are issued for one share of existing stock, and when this is par-value stock, the par value is reduced.

CHAPTER XXXI

THE PROVISION OF NEW CAPITAL

In our study of the financing of the corporation, we have passed in review (1) its promotion, (2) the materials which can be used in making up its capital structure, (3) the principles which control the selection and arrangement of these materials in a plan of capitalization, (4) the more important financial problems of management. We have next to examine the rules which regulate the growth and expansion of the business.

Biologists tell us that organisms never stand still for long, that they are always advancing or receding. To stand still is the beginning of decay. The same law of life controls the activities of business organisms made up of human beings and dealing with other human beings as competitors and customers. If a business is to live it must grow.

New Capital as a Protection against Competition

An influence which is effective in forcing a corporation into a policy of expansion is the necessity of guarding against the encroachment of competitors by occupying the territory in which these competitors would thrive. If the demand for its products or services increases, the corporation must enlarge its facilities to supply the demand; if it does not, and competitors are permitted to occupy the new territory, there is danger that they may follow up this conquest by an approach to closer quarters.

An illustration of the reasons for providing additional capital funds is given in a circular letter of the president of the Central Union (Bell) Telephone Company to the

stockholders in 1901, at the time when the Bell Company was embarking on its policy of expansion.

After two months' investigation I find it imperatively necessary that at least $3,000,000 be provided without delay. The people of the states of Illinois, Indiana, Ohio and Iowa want telephone service. Will you supply it, or must someone else? Are you doing it with fewer than 70,000 stations? No. When you have 300,000 exchange stations, then you have a good start, not before. When you have 150,000 exchange stations, at proper rates, you will have a plant upon which you can earn something with which to build up the second 150,000. With your present 70,000 stations, you cannot build up anything except opposition. You are not satisfying the public, because your system does not reach far enough. There are scores of villages and small towns, taken as a whole, that should have 50,000 telephones, and in which the company has not one single instrument. What you want done must be done now. Later on, and a very little later at that, will be too late.

An illustration of the truth of the observations contained in this circular came under the writer's observation in Hammonton, N. J., a town of about 4,000 people. The Bell Telephone Company had possession of the field; there were only about twenty-five stations in the town; the instruments were antiquated, the service wretched, the rates high. Since the Bell Company showed no disposition to improve matters, the citizens of the town organized a company, raised $20,000 and installed an exchange, which in the first year served 300 subscribers and furnished a considerable amount of long-distance business to the competitor of the Bell Company. The Bell Company could easily have had these subscribers, if they had shown proper enterprise. Many of these small companies have since been acquired by the Bell System, often at high prices.

Individuals and Partnerships Not Permanent Forms of Organization

In the days when business was organized around individuals, in partnerships, growth was limited to individual

capacity, which is seldom transmitted to the next generation. Business life was short. When the founders died or retired, a reorganization or a sale was usually necessary. Business ability, a development of the acquisitive instinct, is an inheritable trait, but is usually overlaid in the second generation with manifestations of other instincts. It is "contaminated" by the parental bent seeking expression in works of charity and education, or by the self-regarding instinct which finds expression in costly display which may be seen of men, or in the harmless survivals of the predatory régime, horse- or boat-racing, mountain-climbing or big game-hunting, or in the pursuit of power in the political arena. Run over the names of the business giants of the last generation. The second generation of Rockefellers are occupied with conservation rather than expansion. Marshall Field left no descendant of comparable ability, nor did Jay Gould. The stream of Vanderbilt business genius, holding on for four generations, an extraordinary manifestation of the persistence of business ability, is no longer visible. The younger Hills have not apparently inherited a full measure of their father's constructive genius. Exceptions may be noted. The Morgan family is still hard at work. Mr. Harriman left descendants who promise well. For the most part, however, rich men's sons do not emulate their fathers. If we relied upon the persistence of family ability to continue enterprises, most of the business enterprises of each generation would expire with the founders.

Permanence of the Large Corporation

Fortunately, the modern corporation, especially when it has reached substantial size, is independent of individuals. Rules of procedure, established lines of business conduct based on long and successful experience, traditions of policy, grow up for the guidance of the officials. These great organizations are like the trees of the primeval forest.

They are wide and deep rooted in the desires and necessities of mankind, and in preferential opportunities to supply human wants. Their affiliations go into every line of human activity. They have their spokesmen in the state legislatures and in the national Congress. The leaders of the bar are among their counsel. Judges, both state and Federal, are alert to protect their rights. They are allied with banks, insurance companies, mining companies. Public service commissions, as shown in the recent hearings in New York, because of the great importance of the utility companies to the communities they serve, and the great ability with which they are represented before these commissions, do not regard the large public service companies with any hostility—quite the contrary, in fact. Large corporations are able to equal in quality and price the best efforts of their competitors, and, in the words of the late Theodore P. Shontz—"when price and quality are equal, then friendship begins." Their methods and machinery are standardized. They spend enormous sums on research and on patent protection. For 1927 research expenditures by private companies was estimated at $200,000,000. Their advertising appropriations run into many millions. The directing members of their personnel have competent understudies to take their places in the event of death or resignation. Their working funds are kept at such large figures that an ordinary depression does not disturb them. The great corporations now dominant in every line—transportation, mining, manufacture, commerce, merchandising—are, in the utmost permissible limit of that word in human affairs, immortal, independent of changes in membership and management.

Illustrations of Corporation Growth

Unlike other organisms, these great corporate beings grow continuously. The Bell System, which is controlled by the American Telephone & Telegraph Company, offers

a striking illustration of large scale and rapid expansion. The company has learned its lesson. In 1928, the assets of the combined companies increased at the rate of over $1,000,000 a day for construction alone. The company during the year added 798,592 telephones to the number owned and operated. As the report says, "The increase in the standards of living, the growth of business generally, a more rapid and accurate telephone service, a growing appreciation of the value of the service, and the continuing effort of the entire Bell System personnel to see that every telephone user in the United States has adequate telephone facilities for his or her comfortable and convenient use, as well as the increase in population, all contribute to the growth of the telephone business."

Varying in amount but persistent in tendency, the large corporations are adding to their productive assets. Sometimes it is a revolutionary development in metallurgy such as that worked out by the Anaconda Copper Mining Company a few years ago, or the purchase of a source of supply of new material in the acquisition of the Chile Copper Company by the same company. On the other hand, a company may follow the methods of the Anaconda in swallowing the American Brass Company, or of the Pennsylvania Water & Power Company when its controlling interest bought the market for its Susquehanna River power plant in the purchase of the Consolidated Gas, Electric Light & Power Company of Baltimore. Or a public utility will add to its power plant as did the Commonwealth Edison Company of Chicago, or the Philadelphia Electric, or the New York Edison, each of which has more than doubled its generating capacity in recent years. Or a manufacturing company will add to its lines as the DuPont Company in its purchases of chemical and varnish works to increase its output of lines allied to its main business. Or a company will expand along lines of integration as the Ford Motors Company which

bought the Pond Creek Coal Company to make itself independent in its fuel supply, a purchase which carried with it a large investment in by-product coke ovens. Or perhaps the company is a commercial organization, like Kresge or Kroger who are continually adding new stores.

Rate of Growth Dependent on Demand

The rate of growth of corporate capital varies according to the shifting currents of demand. Some lines of investment, such as street railway transportation, are stationary or declining. Others, such as the interurban electric railway business, are declining. The railroads, in spite of certain adverse influences operating before the traffic debacle of 1930-1932, rapidly expanded their plants, although mileage remained stationary. The railway expansion program for 1929 called for $1,247,792,000 of expenditures for the Class A (large) companies. Until 1930, by spending vast sums in reducing operating costs, the railroads increased their profits in spite of heavy losses in passenger traffic. On the other hand, light and power companies are rapidly expanding. Gas sales, in particular, are increasing faster than the facilities of production and distribution, and water companies, supplying the one utility service for which there is no substitute, steadily grow.

The Investment Banker Directs Business Expansion

At the center of financial control stands the investment banker, keenly alert to every change in human interest, directing the stream of investment, this way or that, as the opportunities of profit in different lines darken or grow bright. Now the radio engages his attention, then the chain store movement, next is the aircraft industry. At times there is a revival of interest in industries which have long been quiescent. Shipping securities, long neglected, under the liberal subsidy and construction loan provisions recently established by Congress by the Jones Act, are at-

tracting attention. The copper industry, long depressed, sprang into worldwide activity in 1926, only to collapse with the opening of new low-cost mines in Africa. Steam railway electrification promises large opportunity for investment. The investment banker, reflecting the investor's preference, directs these developments. As he directs his commitments this way or that, industries grow. When a business ceases to expand, the investor abandons the field.

In every line of industry and trade, we find this tendency to expand, to improve, to reduce costs. The desire for gain, the pressure upon managers by stockholders for larger dividends, the prestige of success, the unceasing operation of the instinct to construct and improve, the fear of competitors' encroachments unless new territory is occupied, explain the quickening pace of industrial improvement.

High Cost of Labor as an Incentive to Investment

Of peculiar importance as a motive-forcing improvement in industry, is the rising cost of labor. In Philadelphia and vicinity, during the fifteen years ending 1929, the wages of common unskilled labor more than doubled. Fifty cents an hour was the general wage rate for unskilled labor. State laws have reduced the amount of child labor, and a higher standard of living is taking women out of the mills. The immigration laws have sharply reduced the supply of unskilled labor from abroad. This rising cost of labor emphasizes and hastens the advent of the "Iron Man," the automatic machine which takes the place of human hands. Since this substitution of machinery for labor is the most significant feature of modern industrial life, the line along which investment in plant is chiefly developing, a few illustrations may be permitted.

Conditions Precedent to Labor-Saving by Machinery

In any industrial operation where the material to be worked on is uniform and the operations repeat themselves,

machinery can be substituted for hand labor. On the other hand, when the operations are irregular, and especially when the raw material is not uniform, the use of machinery is restricted. No successful cotton picker, for example, has yet been put on the market because cotton ripens irregularly on the same plant. On the other hand, machinery can be used in all industries in wrapping, counting, sorting, elevating, and conveying. Even such a manual operation as weeding can be handled mechanically, if only the plants are uniformly spaced.

Illustrations of Labor-Saving Machinery

For example, in a plant devoted to the wholesale baking of cakes, the batter, after being mixed, was weighed by six girls who weighed the batter for each cake, dipping the batter into a pan which rested on a scale. These pans would be emptied into the bake pans one at a time. The wages of the batter weighers amounted to $4,680 per year. In the weighing machine which has replaced the weighers, the mixed batter is put into a tank and from outlets in the tank is put into cups at one end of the scale. When the cup is filled to the proper weight, the scale is pressed down on the batter cup, and this pressure operates an electric switch which closes the batter outlet. Five of these cups are filled at one time, and when all are filled, the cups open and drop the batter into the pans. This machine, in addition to saving labor, establishes a uniform weight and size of the cake, thus avoiding the waste of overweight which existed under the old method. Interest and depreciation on this machine amount to $256 per year, resulting in a net direct saving of $4,424 per year. In the same industry, gravity conveyors to run the pans in and out of the ovens, costing $5,000, have saved $2,200 in wages; a pan-lining machine, costing $6,200, has replaced five girls at a total yearly wage of $3,400; a box-forming and lining machine, at a cost of $3,000, replaced seven girls, whose

combined wages equaled $5,000 a year; and box-sealing machines costing $4,500 have saved $3,000 in wages. Here are four machines costing in all $18,700, with combined interest, depreciation, and maintenance charges not exceeding $4,000 per year, which have saved $13,600 a year in wages alone, in addition to the improvement in the product and avoidance of waste.

Examples of similar substitutions can be multiplied indefinitely. No industry can be considered standard, when operations adapted to automatic machinery are performed by hand labor. Many problems of replacement are not yet solved. For example, candy and cigar boxes must still be lined by hand, and bricks must still be removed from the machine, piled in kilns, loaded into wagons and laid by hand, because the machines to do the work have not been invented. In all such cases, the problem of automatic machines will eventually be worked out, since the opportunity for a very large economy is presented. From 1923 to 1929, American railroads, because of mechanical improvements and better organization reduced their number of employed over 10 per cent. Those that remain handled an increased volume of business at higher wages. From 1920 to 1929, the number of workers in a selected list of American manufacturing industries has decreased over 600,000. The decrease in agricultural working population, due to the mechanization of agriculture, was also large.

Displaced Labor Absorbed by New Industries

If this displacement of labor by machinery, so far as the individual laborers are concerned, were permanent; if these millions of present and prospective workers who lose their present employments were to drop into idleness, to become public charges, as many critics of industrial progress predict, the future of America would be black. The institution of private property would be doomed. As Mr. Schwab puts it, "workers must be fed. If they cannot

feed themselves, we must feed them." If human desires were limited, and new wants did not make new demands on production, we could envisage the following sequence of events: a continued displacement of labor by machinery, a growth of a huge proletariat of unemployed who must be fed, and who have votes; a constant rise of taxation to feed them, and the eventual absorption of the entire produce of industry by the State, which, under one name or another, would be socialism. Great Britain, with its large "dole" for the unemployed, shows what may happen when new industries are not developed to provide for displaced labor. Up to the present depression no such result was visible in the United States. New wants are constantly creating new industries and new opportunities for employment. The automobile industry alone, it is estimated, absorbed 3,500,000 workers (up to 1929). The heating plants of the United States are still to be adapted to the requirements of climate, especially to furnish "manufactured matter," in the summer. The radio, the moving picture, good roads, the telephone and light and power industry, the rebuilding of cities, which never ceases, the development of inland waterways, have absorbed the displaced multitudes into new and often better-paid employments. It is necessary, however, if prosperity is to continue, that new industries based on new means of satisfying human wants should continually be developed. It is certain that the displacement of labor by machinery—technological unemployment—will continue. Furthermore, entire industries, such for example, as anthracite coal, are endangered by the competition of oil, coke, and more recently, natural gas. The rapid shifts in consumers' choice, for example, from wool and cotton to silk and rayon, are responsible for large displacements of labor in the vanquished industries. New industries *must*, we repeat, be developed to absorb this surplus labor. Failing this, serious consequences are to be anticipated.

Provision of Working Capital

New capital may also be required in the form of cash and cash assets as working funds to handle an increased amount of business. If a company makes large additions to plant, or if the production of its plant shows a substantial growth, in case it does not make corresponding additions to its working capital, it is forced to become a heavy borrower. While this situation causes little inconvenience when rates of interest are low and money easily obtained, should a financial stringency occur, when loans cannot be renewed, serious trouble may result. After the depression of 1920–21, many industrial corporations were forced to put out bond issues at high rates of interest to take up the heavy bank loans. Even under ordinary conditions, an inadequate working capital may result in heavy expense to the corporation. The report of the president of the Pressed Steel Car Company for the year ending December 31, 1901, contains the following:

Since the incorporation of the company the profits have aggregated $4,312,285. Out of these profits has been paid $2,625,000 in dividends. The McKees Rocks plant cost $5,581,580, and additions and improvements to original plants amounting to $555,702, have been taken out of the initial working capital and earnings. From this it will be seen that the actual cash working capital has been encroached upon, but the plants and capacity have been more than doubled, and the monthly production increased from $1,000,000 to upward of $2,000,000, the full operation of the plants.

It is necessary to carry between $4,000,000 and $5,000,000 worth of material on hand, and for this purpose the company has been compelled to be an extensive borrower. During the year it was thought prudent to fund this indebtedness. Therefore, a mortgage for $5,000,000 was made to secure five per cent notes maturing at the rate of $500,000 each year, with the right to anticipate payment of all or part. These notes have been disposed of on terms advantageous to the company. By this means the company secures extra working capital, and its interest charges are limited not to exceed $250,000 the first year, and $25,000 less every year thereafter. There was disbursed last year for interest on borrowed money $215,821, which was charged

off to operating expenses, and we believe that more than the difference appearing between this amount and $250,000 can be saved in extra discounts on materials purchased.

Profits Earned by Working Capital

The Pressed Steel Car Company, in funding its large floating debt, not only made the economies indicated in the president's statement, but also removed a danger of embarrassment which might have resulted from failure to renew these loans. The receivership of the Westinghouse Electric & Manufacturing Company, in 1907, was due to inadequate working capital, and to the efforts of the company to supply this deficiency by contracting bank loans, and by piling up obligations to merchandise creditors. Working capital is properly regarded, not merely as essential to the safety and prosperity of a company, but as perhaps the most profitable part of its equipment for business. It enables the company to carry large bank balances on the strength of which, with the company's good credit, large loans can be made to take advantage of opportunities for the purchase of materials and for the discounting of bills. At the same time, adequate working capital makes resort to the banks for more than temporary and occasional accommodation unnecessary.

In recent years the large companies, which set the standard for business, have accumulated enormous cash resources. The immense volume of working capital, held in reserve for contingencies, has sought employment on the stock exchanges. In the last week of September, 1929, these loans "for the account of others," amounted to $3,860,000,000, most of which consisted of surplus working capital of corporations. The Ford Motor Company furnishes a conspicuous example of large liquid funds. The amount of cash held by the Ford Motor Company for four years was as follows: 1928, $275,926,656; 1929, $346,937,496; 1930, $382,898,719; 1931, $372,483,105. These large cash re-

sources enabled Mr. Ford, without embarrassment, to absorb within two years an estimated loss of $115,000,000 resulting from the development of Model A. In Chapter XXVII of Part I we have seen that this development is seriously affecting the commercial loans of banks. Large corporations no longer depend upon banks. They are lenders, not borrowers. The banks must look to collateral loans, real estate loans, bond investments, and installment loans to employ the funds intrusted to them. If the movement toward self-financing, independent of banks, continues, a serious decline in the commercial banking business is to be anticipated.

New Capital Required for Plant Reconstruction

New capital may be required for the reconstruction of a plant where a profitable business has been sacrificed because the physical condition of the property has been neglected. A case in point is that of the Kansas City Southern Railway Company when taken over by the new management in 1905. Here was a road operating in a territory rich in traffic possibilities, and carrying a sufficient amount of traffic to pay its interest charges, in spite of its impaired physical condition. It was estimated, to put the property in a suitable condition for handling present and prospective traffic, and to expand the business of the company to its proper size, that the following expenditures would be necessary:

Repairs and improvements to track	$2,983,856.00
Reënforcements and reconstruction of bridges	510,000.00
Repairs and improvements to equipment	540,000.00
New tracks	388,000.00
New freight depot facilities	125,000.00
New water stations	65,000.00
New shop facilities	435,000.00
New telegraph	34,000.00
New fencing	180,000.00
Work at Port Arthur, Texas	50,000.00
New equipment	1,604,749.50
TOTAL	$6,915,605.50

Most of these expenditures, since they were of the nature of replacements, should have been spread over a period of years, and charged to operating expenses, not to capital. Over $5,000,000 of the amount which was deemed necessary to be spent on the property, represented deferred charges to maintenance and betterments. The company should not, in a narrow view of the situation, have raised any capital by the sale of securities for the reconstruction of its plant, but should have devoted its surplus income to the purpose. Under the conditions confronting the management, however, there was no surplus income. At the same time, the expenditure of this large amount of money, no matter how provided, would put the company into position to make large earnings. Said President Edson:

Your officers are convinced that with the improvements and additions which have been set forth, which will require two or three years to complete, and which will enable the road to handle expeditiously and economically all traffic which may be offered, the gross earnings will show an increase of from twenty to twenty-five per cent over the gross earnings for the year ending June 30, 1905, and that, with the economies which the additional facilities will make possible, the ratio of operating expenses, including taxes, to gross earnings, will not exceed seventy per cent.

Taking as a basis the minimum of twenty per cent increase in gross earnings, the following results may be confidently expected under existing commercial conditions:

Gross earnings	$8,272,387.54
Operating expenses and taxes	5,790,671.28
Net earnings	$2,481,716.26
Interest on bonds owned	32,501.00
Total income	$2,514,217.26
Interest on bonds	900,000.00 [1]
Net annual surplus from income	$1,614,217.26

From which must be paid, of course, the interest on such funds as may be borrowed for improvement.

[1] Not all deductions are given.

From this it seems certain that, unless overtaken by some unforeseen and general commercial disaster, the earning capacity of the property amply justified the capitalization of the amount necessary for improvements and extensions.

The surplus for the period to which this report refers was only $610,191.80. This income was in danger of disappearing, owing to the inability of the company to handle the business offered. The expenditure of approximately $7,000,000 would show earnings of 14.28 per cent on this amount. The conclusion that the cost of rehabilitating the Kansas City Southern Railway Company should be defrayed out of new capital provided for the purpose, and charged to the various asset accounts, instead of being charged to operating expenses or depreciation, was evidently correct. Acting upon this advice, the stockholders authorized an issue of $10,000,000 4½ per cent second mortgage bonds, pledging them as collateral for $5,100,000 negotiable gold notes. Most of the proceeds were spent in making good the omissions of the past for the sake of obtaining the profits of the future.

Obsolescence and New Capital

Obsolescence presents a serious problem of capitalization. Suppose, for example, that a new locomotive is introduced which doubles the efficiency of the standard type. The railway has good credit. It can raise all the money necessary to replace its locomotives with the new type. Shall this be done? Suppose that a locomotive runs 50,000 miles a year at a cost of fuel per engine mile of $.90, or $45,000. The new type shows a fuel cost of $.45 per engine mile, or $22,500. The average cost of the locomotives on the road, less 5 per cent depreciation, is $25,000, and their average life expectancy is 10 years. The company owns 800 locomotives fit for service. To replace these with the new type will cost $32,000,000, less the problematical value of the old engines for sale in various out-of-the-way places. The fixed

charges on the new engines amount, including interest and depreciation, to $3,520,000 per year. The annual saving on 40,000,000 engine miles will be $18,000,000 per year. The loss from scrapping the old locomotives will be $20,000,000. Interest on this sum, plus a write-off of the loss over eight years will be $3,700,000 per year for eight years, or a total annual fixed charge of $7,220,000, against which is a saving in fuel of $18,000,000, or $10,780,000 net profit on the replacement. There can be no question, under the assumed conditions, that the scrapping of the old equipment is a wise move. This is an extreme case, although one which is foreshadowed by recent developments in locomotive design and practice.

The larger the saving on the new appliance or process, the more immediate should be the substitution. Another instance of impending change in the railway field is the concrete roadbed for the present built-up roadbed. Before these changes are made, exhaustive tests assure their practicability, but when that is once established, there should be no hesitancy in writing off the loss, and fully capitalizing these highly productive expenditures.

Reading Coal & Iron Company Illustrates Capital Applied to Reconstruction.

A recent illustration of the issue of new capital to meet an emergency caused by obsolescence is furnished by the Reading Coal & Iron Company, the largest concern in the anthracite industry, which produces one-eighth of the total anthracite mined. This company operated thirty-two breakers each with its separate steam plant. Its earnings have been very disappointing—over the six years ending 1928, showing a deficit below operating expenses and charges of $8,300,000. Under normal conditions, the Coal & Iron Company could not borrow any money. Indeed, a drastic reorganization was indicated, and even this, with interest charges—the only place where a reorganization could help

—standing at only $2,036,000, would give no substantial relief. Instead of proposing a reorganization, the stockholders and bankers have purchased $30,800,000 of 6 per cent debenture bonds, of which two-thirds will be used to centralize coal preparation in six modern centralized breakers, electrically operated. The engineers estimate the savings from these improvements at $4,400,000, leaving a substantial margin for dividends. This case closely parallels that of the Kansas City Southern described above. Earnings are nonexistent with present facilities. If these plants are modernized, they will be profitable.[2]

[2] In such a case, if surplus or depreciation reserves are inadequate, accurate accounting demands that the book value of the plant displaced by the improvement, less salvage which is always small, shall appear as a deficit on the balance sheet, or more euphoniously, as unexpired charges to capital account, which can be written off over a series of years, out of profits. The Reading Coal & Iron Company had a large book surplus and ample reserves, so that no deficit set up on the balance sheet will be necessary.

CHAPTER XXXII

PROVISION OF CAPITAL OUT OF PROFITS

Our next inquiry concerns the method by which the necessary money for the extension of plant is to be provided. A company may either (1) raise money to be invested in the improvement and extension of its plant, or (2) it may acquire other corporations which possess the necessary assets, or (3) gain the ownership or control of the properties of these companies. These companies it may acquire either directly by the exchange of its stock or bonds for the stock of the company which owns the desired property, either by merger or by purchase of assets, or, it may, through the medium of a holding company, unite its control through joint ownership with the control of the other company, or it may sell its own securities for cash with which it buys control of another company, or it may gain control of a desired property, by some form of lease, or by an operating agreement. The first plan is the direct method of providing capital, either out of income, or by the sale of securities; and the second and third, the indirect provision of capital by various methods of consolidation.

Methods of Providing New Capital

Capital funds may be directly provided for the corporation by one or more of the following methods: (1) the money required may be taken out of profits; (2) stock may be issued; (3) the corporation may borrow money, either on short term notes or by the sale of long term bonds.

We have already discussed the necessity that a properly managed corporation should never pay out all its earnings

to stockholders. Conservatism demands that a balance should be retained for the business. The purpose of this reservation is to make sure that a dividend rate, once established, may be maintained. The investment of these profits reserved from dividends, if wisely made, will increase the earnings of the company, and should, therefore, appear as additions to its assets.

Conservative Administration Results in Substantial Investments out of Earnings

If directors follow a conservative policy in the administration of the income account of their company, they will make large investments out of revenues in working capital, plant, and equipment. They will raise the standard of the property by betterment appropriations. They will also maintain a number of reserves: for depreciation and renewal of plant, for bad debts, or for property insurance. They may be required, by the terms of their mortgages, to set aside out of their income a sinking fund appropriation, and it may be provided that the amount of the sinking fund appropriation can be invested in the plant. Finally, in order to maintain an even rate of dividends, the directors must reserve a portion of each year's profits, for credit to surplus or undivided profits, an amount which is allowed to remain in the business, and which, in time, may amount to a large sum.

These reservations out of income are at the general disposal of the business, unless they are carried in the form of "segregated funds."[1] With this exception, undistributed profits, no matter in what liability accounts they may appear, are invested in the business wherever needed, in plant, current assets, or securities of controlled corporations.

[1] Funds are *earmarked* sums of cash or securities which are set aside to be immediately available for an emergency. A fire insurance fund for a company which carries its own insurance is a familiar example. They are not available for any other purpose. The balancing of reserves with funds, however, is unusual.

These reserved profits are at the disposal of the business and represent provisions of capital out of profits.

Shall the directors go farther than these requirements of safety and stability in reserving profits from stockholders? Shall they treat the profits as their first resource when in need of money, and comfort the stockholders, as did Collis P. Huntington, who, on one occasion, remarked of the stockholders of the Pacific Mail Steamship Company, that it made no difference to them "whether they received their dividends in money or in ships?"

An interesting illustration of the extremes to which a policy of conservatism in providing new capital can be carried is furnished by the Lehigh Valley Railroad Company.

The Lehigh Valley: An Illustration of Excessive Investment of Earnings

A railroad balance sheet presents a statement of assets and liabilities. By comparing one balance sheet with another the progress of the road in assets and earning power can be noted. From the movement of the liabilities, the sources from which funds were obtained can be determined. A series of annual balance sheets, therefore, contains a record of progress or deterioration, the financial history of the corporation. When we examine the balance sheets of the Lehigh Valley from 1898 to 1902, we find, apparently, that for five years the company stood still. The principal items of the condensed balance sheet for the two years mentioned are as follows:

	Assets	
	1898	1902
Cost of road	$18,639,291.95	$18,639,291.95
Cost of equipment	19,018,419.98	19,018,419.98
Securities owned	32,949,322.14	39,300,209.80

The only change is an increase of $6,350,887.66 in the securities owned, accounted for by the acquisition of the stock of the Lehigh Valley Terminal Company. The valuation of assets did not change, the liabilities also remained substantially unaltered. The stock remained at $40,441,100 and the bonds decreased from $45,642,000 to $41,900,000. A singular spectacle was presented by the balance sheets, a company whose accounts showed neither market growth nor decline.

Earnings Concealed in Operating Expenses

Turning from this spectacle of stagnation to examine the income account of the company, we find a record of growth and prosperity. Gross earnings from operation increased 25 per cent in five years. The revenue tonnage of the road gained 150 per cent, while the mileage remained at about 1,400 miles. Unless the rates received suffered a severe decline, or unless operating expenses considerably increased, the net income of the company over these five years should show a considerable increase. So far from decreasing, the ton mile revenue of the Lehigh Valley increased from 0.500 to 0.554 cents. Furthermore, not merely did the rate received for transporting each ton of freight increase, but the expense of moving the tonnage declined, and the total earnings per train mile increased from $1.58 in 1898 to $2.09 in 1902. From those figures of earnings and expenses, a considerable increase in income available for distribution to creditors and stockholders might be expected. On the contrary, the gross income of the Lehigh Valley, which in 1898, a year of depression in the traffic and earnings of this section, was $6,799,255, in 1900 was $3,939,155, and in 1901, when no strike was in progress, was only $6,871,010. In short, the stockholders, who had received no dividend since 1893, were puzzled to understand why their company could be at the same time prosperous and unfortunate, why it could be doing so much business and

have nothing left for dividend payments to its stockholders many of whom were sorely distressed because of the suspension of dividends.

Reserving for the present the explanation of this anomaly, let us compare the results of 1903 with those of 1902, the last year of the administration which took over the management of the road in 1897, and resigned it in November, 1902. On June 30, 1903, the total income available for distribution was stated to be $8,279,248, an increase of $3,628,120 over the statement of the preceding year. Evidently, a sudden and radical change in accounting methods had taken place which, after allowing for a million and a quarter of dollars in improving the property, showed net income available for dividends of two million dollars, or 5 per cent on the stock. More strictly interpreted, the accounts of the Lehigh Valley for 1903 show a surplus available for distribution of 8.1 per cent on the stock, as compared with a deficit of more than a million and a quarter in 1902, an apparent gain of $4,606,485 in surplus, although gross earnings increased only $2,734,535.

We have here presented the outlines of a noteworthy chapter in railway financial history, which raises a question of deep interest to investors. How far should the cost of improvements, which increase the earnings of a company, be taken out of earnings, and how far should their cost be defrayed by the issue of new capital? In other words, how far can a corporation, in justice to its stockholders, by refusing to issue new capital, keep its stockholders out of their dividends?

President Walter's Explanation of This Policy of Investing Earnings

Immediately after the retirement of Mr. Elisha B. Wilbur from the presidency and the election of Mr. Alfred Walter to succeed him, the directors of the Lehigh Valley inaugurated a policy which, for conservatism and extreme

caution in the disbursement of profits, has rarely been equaled. In his report for the following year the new president stated:

> The policy of the present management has been, and for some time to come must continue to be, in the line of liberal, and perhaps unusual expenditures on both roadbed and equipment, in order to adapt the property to the most economical operation. Substantially all the business of the company is competitive . . . and rates are steadily and rapidly declining. To derive any profit from them the railway must be so improved in its characteristics as to be able to work much more cheaply than ever before. The companies with which the Lehigh Valley Railroad is in competition (New York Central and the Lackawanna) have been adapting themselves to like requirements for many years, but the Lehigh Valley Railroad, having done less in these respects until recently, must now proceed with greater activity.

In another report Mr. Walter explained the limited capital resources of the company, authority existing for the annual issue of only $1,000,000 of bonds. No application was made, however, for any increase of this authority.

The plant of the Lehigh Valley needed substantial improvement. There was no doubt of that. Both engines and cars were light and had to be replaced. Sidings had to be lengthened to admit of longer and heavier trains being handled. The repair shops had to be concentrated, the terminals enlarged and improved, and many additional replacements of way and structure were required.

Effects of This Policy upon Operating Efficiency

The reconstruction of the system required a large amount of money and Mr. Walter proceeded to take this out of earnings and to charge it to operating expense. For many years the operating ratio of the road had been high, owing, in part at least, to inefficient management and inferior equipment. In 1894 the ratio was 76.86 per cent of gross earnings, from which it declined steadily to 70.16 per cent in 1898. From this point, the ratio advanced to 80.97 per cent—an unprecedented figure for a prosperous railroad

company in 1902. More significant than the increase in the general operating ratio was the change in the relations between its component parts. In 1895, under the old régime, only 22.56 per cent of the total operating expense was represented by maintenance of way and structure. In 1902, this proportion had increased to 40.31 per cent. All this time, the efficiency of the system, as represented in its average train load, was steadily increasing, from 383.87 tons in 1898 to 466.83 tons in 1902, a larger train load than even the New York Central could show. This increased efficiency of operation was the result of the reconstruction of the property. The entire cost of these replacements and repairs was charged to operating expense. From 1898 to 1902, if we allow 65 per cent as the normal operating ratio, the Lehigh Valley, under Mr. Walter's management, spent almost $13,000,000, which, under different circumstances, would have been available for interest and dividends.

President Walter's Policy Unfair to Stockholders

We can now answer the question which was raised concerning the legitimacy of the policy pursued by the former management of the Lehigh Valley. Looking at the matter from the standpoint of the physical condition of the property, a plausible defense can be made for charging the cost of its rehabilitation to operating expense. If all expenses which result in raising a railroad toward the standard set by its competitors are to be classed as operating expenses, no criticism can be made. The physical condition of the New York Central was apparently taken as the goal of the Lehigh Valley's ambition. Only when the Lehigh Valley had been rebuilt on the Central model, were the stockholders to get anything. Looked at as a problem in comparative operating efficiency, Mr. Walter's method of solution can be approved, the more so because he succeeded in his attempt.

When we consider the matter from the standpoint of the Lehigh Valley stockholders, however, the severe criticism

to which the management was subjected had some justification. The company could have borrowed more than the amount which was reserved from earnings, and could have effected the necessary improvements within a short time, instead of spreading them over a series of years at the expense of the stockholders. It is equally certain that if this policy had been adopted, a substantial dividend could have been paid from 1899, while the physical efficiency of the property would have been fully maintained.

It has long been considered improper for the directors of a public corporation, that is, a corporation whose stock is widely held, and upon whose dividends thousands of investors depend for a part of their income, to pursue a policy of primary reliance upon profits for capital funds. The company has applied to the investors to furnish funds for their enterprise. The money has been contributed with the understanding that if profits were earned, so far as a distribution could safely be made, they would be distributed in dividends. Beyond the maintenance of proper reserves, and the investment of surplus earnings over conservative dividend payments, the directors of a public corporation cannot, therefore, with good faith to their stockholders, withhold profits for investment in plant. If the business is profitable, and demands new capital, the stockholders demand that the stocks or bonds of the company shall be increased in order to obtain this new capital, and that they shall not be kept out of their dividends for an indefinite period in order that an ultraconservative policy should be pursued. If the company needs new money, the stockholders are usually willing to furnish it, in case they have been liberally treated in the matter of dividends.

Other Objections to Dependence upon Profits for Capital Funds

There are other objections to the plan of exclusive dependence on profits as a source of capital funds. Profits

are irregular, and it is difficult to carry out a consistent plan of improvement while depending solely upon the business to furnish funds for improvements. Furthermore, the situation sometimes demands that extensive schemes of improvement should be completed within a short time; for example, the extension of the Chicago, Milwaukee & St. Paul to the Pacific Coast; the construction of the Western Pacific from Salt Lake City to San Francisco; and the New York terminal improvements of the Pennsylvania. Earnings may not be sufficient to carry out speedily a comprehensive program.

With a public service corporation whose profits are limited to "a reasonable return on a fair value of its property devoted to the public service," rapid expansion is only possible if capital is freely contributed by the investor. It is impossible under the restriction of reasonable return, even if it were prudent as a matter of business policy, to charge rates which will produce the profits necessary for business expansion. The light and power industry, for example, earns *gross,* about two billion dollars a year, and spends annually one billion on extension of plant. Constant additions to capital out of the proceeds of stock and bond sales are evidently necessary.

Assuming a well-considered opportunity for the investment of money, stockholders' interest requires that the construction work should be carried through in the shortest time. If the improvement is to be paid for out of earnings, in case sufficient earnings are not forthcoming, its completion may be unduly prolonged. The profits of the company over a period of years, therefore, may be much less than if stock had been sold or money borrowed, and the work crowded through as rapidly as possible to the point of producing revenue.

Assume, for example, profits of $200,000 per year available for either dividends or new construction, and that on the new plant, costing $1,000,000, 10 per cent will be

earned. This plant can be completed out of profits in three years, finishing with a bank loan of $400,000 to be paid off in two installments. If stock or bonds are sold, the time of completion will be one year. Within five years, therefore, by the method of construction out of profits, the earnings from the new plant would be $200,000, less interest on the loan, $36,000, and a loss to the stockholder in dividends of $1,000,000, while, by producing the money by an increase of stock or bonds, dividends would be maintained on both new and old stock, and $400,000 added to surplus out of the earnings on the new plant.

Good Faith of Directors Sometimes Called in Question

The withholding of dividends from stockholders creates a bad impression. It is often charged that the majority interests who usually occupy lucrative positions in the company, and who are not infrequently in the receipt of secondary and indirect rewards as a result of their positions, are discriminating against the minority stockholders. It may be charged that they are pursuing a policy which, while increasing the value of the company's property by withholding dividends, is depreciating the market value and increasing the cost of the stock which represents the ownership of the corporation owning the property. Stock costing $50 a share, no matter if 10 per cent or 15 per cent a year is earned, if the dividends are not paid, will in ten years cost $80 per share, even at simple interest. Then if dividends are started at $3 per share, 6 per cent on $50 par, they will represent only 3.75 per cent on the cost of the stock. No matter how much money goes into the property, if nothing goes to the stockholders, the demand for the stock will be very weak and there will be plenty of stock for sale.

Such charges were made against the Southern Pacific management in 1903 by James R. Keene. He alleged that the Southern Pacific revenues were not only being with-

held from the stockholders of that company, but that they were being devoted to improvements for the benefit of the Union Pacific which owned nearly half the stock of the Southern Pacific. The persons who made this attempt to force dividends on Southern Pacific stock were discredited because of their connection with a speculative pool operating for an advance in the stock, based on an alleged promise of dividends by the management. The attack on the directors, however, attracted wide attention, and brought out unfavorable criticism.

Modification of Original Theory That New Capital Should Be Contributed in Its Application to Old and Established Companies

So much for the original theory. Recent business developments indicate that extensive modification and qualifications of this theory, especially applied to manufacturing and trading companies, must be made. In the chapter on depreciation we have seen how many and formidable are the lions which beset the pathway to business success. Greatest of all hazards is obsolescence, not only "out-of-dateness" of machinery and methods, but change of fashion, affecting demand. The classic illustration of obsolescence is the effect of the change in the scope and volume of women's dress upon the textile industry. The danger of competition is always present. Labor troubles, recently even in the South, long supposed to be immune from labor controversies, may seriously affect profits. Business depression is always a possibility. Tariff disturbances are often threatened.

When capital is contributed by the investor, he has a moral right to dividends if they are earned. This right to dividends on his investment is of primary interest to the stockholder. If more capital is needed, he expects to increase his investment, on which at least the current rate of dividends should be paid, but as a condition of his sup-

port he demands that a dividend rate, once established, should be maintained. A suspension or reduction of dividends is regarded as a calamity. The return on the contributed capital of a business should, so far as possible, be protected from the hazards of business.

Starting from the standpoint of income security, we may now formulate a supplementary rule which, because it is based on security of the dividend fund, is not inconsistent with the original theory that profits should not be withheld from stockholders for investment in plant if they can be safely distributed. The greater the risks of an industry, the larger should be the proportion of new capital which is provided from earnings, and the smaller the amount contributed by the investor. To put the matter in terms of the present discussion, the greater the risk, the larger must be the reserves for contingencies. Since these reserves are usually invested in the business, the contribution to capital of earnings varies directly with the estimate of risk.

Let us illustrate the operation of this rule by a comparison of three recent balance sheets (1928), which show three typical cases of capital policy.

The United Gas Improvement Company—an Illustration of the Capital Policy of a Stable Business

First comes the United Gas Improvement Company. This corporation operates in the public utility field. It is primarily a holding company for a large number of light, power, and transportation enterprises, widely scattered throughout the eastern states. It operates the Philadelphia Gas Works, controls the Philadelphia Electric Company, and is heavily interested in the Public Service Corporation of New Jersey. These companies are municipal monopolies. They enjoy exclusive rights to supply products and services—gas, transportation, and electricity—which are necessities of modern life. While the company had its troubles during the War period when costs of electric rail-

way operation overran rates for a short time, it was never in serious difficulty, and, in recent years, its earnings and the earnings of its subsidiaries have constantly grown. From all indications, there is not a cloud on its horizon. Competition nowhere seriously cuts into earnings. Demand is increasing. Permitted returns on property values are liberal. A company in this situation can safely and closely follow the old rules of capital policy, paying out most of its profits in dividends, and relying upon stock and bond sales for the expansion of its plants.

This, as the following balance sheet shows, the United Gas Improvement Company has done:

DECEMBER 31, 1928

Assets		*Liabilities*	
Property and plant.	$489,747,613	Common stock	$197,222,950
Investments	125,087,907	Scrip	15,775
Sinking funds and special deposits..	3,800,389	Minority interest in subsidiary corporations	23,798,230
Cash	22,397,729	Preferred stock subsidiary corporations	71,860,328
Notes receivable ..	4,432,306	Funded debt subsidiary corporations	223,750,550
Accounts receivable	17,171,593	Notes payable	10,433,500
Materials and supplies	6,182,735	Accounts payable..	10,845,994
Prepaid accounts ..	564,451	Accrued accounts..	13,464,694
Deferred charges ..	2,027,988	Reserves for renewals and replacements	27,870,282
Unamortized debt, discount and expense	10,568,163	Other reserves	9,783,615
		Surplus	92,934,958
Balance both sides.	$681,980,877		$681,980,877

In this capital structure, $571,922,032 represents the proceeds of stock, bonds, accounts, and notes, and $110,058,845 represents profits kept in the business, invested in productive assets. The United Gas Improvement Company has pursued a liberal dividend policy, paying in 1928, $19,788,907 out of net income of $29,015,271. In spite of these large dividends, the company has accumulated over 17 per

cent of its productive assets out of income. Much of this is represented by profits on securities sold. This represents an ultra-liberal policy towards stockholders who receive the greater part of an increasing income, and yet the policy is a safe one because of the stability of earnings.

Capital Policy of the Ford Motor Company

At the opposite extreme stands the Ford Motor Company, which operates in a very hazardous, competitive business, where the leading companies are settling down to a struggle for survival; and where the company in question is still behind its principal rival in the race for supremacy. The last balance sheet of the Ford Motor Company (1928) is as follows:

Assets		*Liabilities*	
Real estate	$156,239,207	Capital stock	$ 17,264,500
Machinery and equipment	152,921,366	Mortgages ..... Accounts payable..	83,900,629
Inventory	102,773,704	Reserves	5,114,656
Cash	275,926,656	Surplus	582,629,563
Deferred charges .	1,048,415		
	$688,909,348		$688,909,348

The Ford Motor Company earned, from 1921 to 1925, $456,664,360, substantially all of which was retained in the business. The next two years, while the plant was being reëquipped for the production of Model A, showed a loss of $115,082,250 which came out of surplus.

Here is a capital policy which is justified by its results. Had Mr. Ford followed the current practice, he would have paid out $300,000,000 in dividends from 1921 to 1925. He would have had outstanding $500,000,000 of preferred stock and an equal amount of common stock. Much of the preferred stock would have been issued for equipment and real estate. A surplus of $200,000,000 would have been considered ample, with cash of $100,000,000. Capitalized in this manner, the Ford Motor Company would have been ranked with the strongest industrials in the world. Its

stock would have sold at high figures. Incidentally, Mr. Ford's personal fortune, if he had decided to withdraw it in large part from the business, would have been over $500,000,000, taking no account of the dividends which he received from 1908 to 1920. Then would have come the crash, when the sales of Model T not only declined, but almost stopped. Dividends on both classes of stock would have been suspended. A heavy decline in Ford Motor stock would have resulted, with possible serious consequences to the general situation. As the matter developed, however, due to the extreme conservatism of the owners, who, in 1919, were reduced to the members of the Ford family, in holding all profits in the business, aside from the general business effect of a year's suspension of operations upon the general demand for materials, the reorganization of the Ford Motor plants, involving a shrinkage of surplus of $115,000,000 in two years, was accomplished without seriously affecting the financial situation. An immense reserve had been accumulated out of profits. This reserve was applied to its anticipated need.

Capital Policy of General Motors

In contrast with the extreme conservatism of Mr. Ford, appears the policy of General Motors. This company in 1928 reported the largest profits, $276,000,000, ever earned by any corporation. This company is more profitable than the Ford Motor Company in its palmiest days. Its assets (1928) are valued at $1,242,894,869.48, of which $569,916,000 has been contributed by stockholders. The company, aside from the large DuPont holdings, is a publicly owned corporation. Its stockholders number 71,563 (average 1928).

The stockholders have been treated with great liberality. In 1917, the common stock, $76,473,300 in amount, paid $2,674,000 in dividends, or at the rate of 3½ per cent. In addition, the company paid 7 per cent on $19,676,800

preferred stock. In 1927, $130,835,700 of 7 per cent cumulative preferred stock, called for $6,561,295 annual dividends.. The common stock had been increased to $435,000,000 by stock dividends, and finally put into the form of 17,400,000 shares of no par value. On both classes of stock, $174,707,758 in dividends was paid in 1928.

Turning now to the balance sheet, this shows the following:

Assets

Current		$468,809,287.27
Among other items this includes:		
United States Government Bonds	$112,351,174.48	
Cash	99,189,838.71	
Inventory	196,692,868.08	
Fixed Assets		$774,085,582.21
Includes, among other items, investments in controlled companies..	117,819,123.62	
Real estate, plant and equipment	542,987,154.81	
		$1,242,894,869.48

Liabilities

Current	$173,020,982.81
Reserves	211,411,561.92
Preferred stock	132,687,800.00
Debentures	2,228,200.00
Common stock	435,000,000.00
Interest of minority holders in subsidiary companies	3,087,730.12
Surplus	285,458,594.63
	$1,242,894,869.48

Contrast between Ford and General Motors

Here appears, in contrast, the policies (1) of a company which is operated to pay dividends to stockholders and (2) a company which is operated primarily to produce the best possible car for the money without regard to dividends, where the prosperity and safety of the company, as distinct from the owners of the company, is the first consideration. Ford has a surplus of $582,629,563, and cash of $275,926,656. This surplus could have been much larger, if the cost of reëquipping the Ford plants to make a new product had been capitalized, added to

asset accounts. Mr. Ford has, however, been notably conservative in these matters. His property account has been kept at a low figure for many years. Taking these balance sheets at their face, however, General Motors shows a combined surplus and depreciation reserve account of $448,138,707.35 or 35 per cent of its total assets. The Ford Company surplus equals 84 per cent of its assets, General Motors cash, counting Government bonds as cash, was 17 per cent of its total assets, and Ford's cash was 34 per cent of his assets. Ford's ratio of current assets to current liabilities was 5 to 1. General Motors' ratio was 2½ to 1. By every test of financial strength, Ford is better equipped for the competitive struggle than General Motors. Ford has retained his profits. General Motors have distributed their profits. Ford has eliminated dividend requirements. General Motors must operate with due regard to dividends. Ford has no concern with dividends. His private fortune outside of his interest in the Ford Company was estimated, three years ago, at $250,000,000, accumulated during his dividend paying period. During this period of competition, Ford can, if necessary, put every dollar of profit into his business. General Motors must take out of the proceeds of each car sold, an average of $97.00 for dividends. When it is considered that the Ford Model A competes directly with Chevrolet and Pontiac, and touches rather closely Oakland and Oldsmobile, 1,539,284 units or 85 per cent of General Motors' sales, the nature and extent of the competition between these two great corporations can be understood. General Motors, to conclude the comparison, in order to buy the Opel Company in Germany, borrowed $30,000,000 from banks, "not wishing to disturb its investments." Ford has never borrowed any money for any purpose, although he issued purchase money notes to acquire the minority stock of his company.

This comparison of Ford with General Motors may be criticized as unfair to the larger company. The Ford

Company is a private corporation, General Motors is a public corporation. General Motors stockholders demand dividends and they have received them. Mr. Ford apparently does not believe in dividends. When his minority stockholders clamored for dividends, he bought their stock. But while the comparison is extreme, it is suggestive. It shows two contrasting policies, the one considering only safety, the other, while not unmindful of safety, considering primarily the obligations of the company to pay dividends to its stockholders. Between these extremes, the directors of every company establish their dividend policy. Which way the balance of choice should incline, the next few years should reveal.

We may conclude this discussion by reaffirming the rule that a company engaged in a competitive business, broadly speaking, manufacturing, mining, trading, shipping, and financial, should proceed very cautiously in incurring capital liabilities and enterprises, where profits are not limited and where hazards are great. Dividends, once established, must be paid, or serious damage results. The profits of successful business are so great that they are equal, if retained, to the most liberal expansion policy. If dissipated in dividends, a company may be found wanting in the time of trial.

CHAPTER XXXIII

THE ISSUE OF STOCK

Assuming now that funds are to be raised for extensions by the sale of securities, the first question concerns the class of securities to be sold. Shall the corporation increase its stock or shall it borrow the money needed?

Rights of Stockholders to Participate in New Issues

The capital stock of a company represents its ownership. This ownership is divided into shares. An increase of the amount of stock increases the number of shares. If there is only one kind of stock, the shareholders, when it is proposed to increase the capital, have two alternatives. They may take the new stock themselves. In this event, their shares in the company's profits remain unchanged. Or they may offer the stock for general subscription. If a corporation has $10,000,000 of capital stock, and proposes to add $1,000,000, each stockholder of record has the right to participate in the increase. The holder of one hundred shares of stock, for example, will be allowed to subscribe to ten shares of the new stock. This would give him the same proportion of interest in the corporation that he had before. It frequently happens, however, that existing stockholders do not take the entire issue. Stock must then be sold to outsiders who are admitted to share in the earnings, and to share in the control of the company on equal terms with the existing stockholders.

Dangers in the Admission of New Interests

To the controlling interests of a company the entrance of new stockholders is a matter of concern. New stock com-

ing upon the market may be used to wrest control from those who now hold it. Especially if, as usually happens with large companies, the control represents no more than a minority, there is danger of losing it.

A celebrated instance of this result was the ousting of Mr. August Belmont and his associates from the directorate of the Louisville & Nashville in 1902. Early in that year the directors, in order to finance some extensions, authorized the sale of 50,000 shares of stock. Under the rules of the New York Stock Exchange, shares were not deliverable on contracts until thirty days after they had been issued. Funds were needed immediately, however, and in order to obtain them, the chairman, Mr. Belmont, was instructed by the Board to sell 50,000 shares "short"—that is to say, he sold stock which he did not own, borrowed the stock to deliver what he had sold, and expected to take up the loan out of the new shares when these should have become deliverable. At the same time, however, unknown to the Belmont interests, a syndicate, headed by Mr. John W. Gates, was engaged in a campaign to purchase control of the company, and, in the course of their operations, they developed a short interest estimated at 120,000 shares, including the 50,000 shares sold by Mr. Belmont.

The directors of the Louisville & Nashville had, in other words, sold more shares than they owned, and they could obtain the stock to make their deliveries only from the syndicate whose advantage it was to bring about this situation. On April 14, 1902, it was discovered that a corner existed in Louisville & Nashville; the price of stock (which had been 107½ a month before), on this date touched 133. A repetition of the May panic of 1901, which was brought about by a similar operation in Northern Pacific stock, seemed imminent. Under these circumstances, short sellers who must obtain shares to repay their stock loans must pay whatever the owners of these shares demand, or go into bankruptcy. Northern Pacific common stock under

these conditions had reached $1,000 a share only the year before with very large declines in the general level of stock values caused by the forced selling of other stocks to meet the Northern Pacific calls. Serious trouble was averted, however, by the recognition by J. P. Morgan & Company, acting in behalf of the general situation, that Mr. Gates and his associates controlled the Louisville & Nashville, and by the purchase of a majority interest in that company by the Atlantic Coastline Railway through the bankers at a figure which rendered a large profit to the Gates syndicate.

Effect of Stock Financing on the Credit Position of a Company

An important consideration influencing the selection of stock as a source of new capital is the resulting strengthening of the capital credit position. The accepted rule is to sell junior securities, preferred and common stock, when these can be sold to advantage, and to reserve senior securities for sale in periods of depression when the public appetite for stock is not keen, and when bonds are in demand. It is evident that the smaller the amount of bonds, the lower are the fixed charges, and the greater is the margin of safety in net earnings over charges. When capital liabilities include a large percentage of stock, bonds can be sold at a higher price than when the capital structure is mainly composed of bonds.

The policy of the American Telephone & Telegraph Company is a striking illustration of the value of following this plan. The bonds of this company amount to only 22 per cent of its capital issues (1928). The Interstate Commerce Commission, so far as it has been able to do so, has always insisted that railroad companies should include a large percentage of stock in their capital issues. Every effort is made, when new stock is issued, to persuade stockholders to increase their holdings, or, failing in this, to obtain

assurance that the new interest shall not only be such as will strengthen the position of the company, but will not be unfriendly to those in control. The strongest inducement which can be offered to a stockholder is to sell him a safe investment at a low price, and the lowest price which the law allows for par value stock is par, the figure at which the stock is usually offered to stockholders.

The Privileged Subscription

This prohibition against the sale of stock below par (unless such a step is necessary to save the company from serious embarrassment), limits the opportunity to raise capital by the sale of common stock to companies whose profits and dividends are so large that their stocks sell well above par. Here again appears an important advantage of stock without par value. With par value stock, a sale at par is possible only when dividends and prospects are so large and rosy as to raise the price of the stock substantially above par, and to hold it above par in the face of an increased supply of stock. With stock of no par value, however, on the basis of any market value whatever, even $10 per share, a privilege can be offered to the holders, because the stock can be sold to them below market value.

The existence of these stock premiums, which reflect high dividends and assured earning power, makes possible the financing of strong companies by the sale of common stock to their stockholders. This plan is known as the sale of privileged subscriptions.

Implications of Stockholders' Rights to Participate in New Issues

Under the law, the stock of a corporation must first be offered to the existing owners. Only if they are unwilling to buy can stock be opened to general subscription. Great care must be taken to comply with this provision of the corporation law, which is of universal application. With

the growing use of convertible bonds and subscription warrants, devices for making securities more salable by some process of "sweetening," commitments for future stock delivery are reaching large amounts. In order to legalize such future stock deliveries, e.g., in exchange for convertible bonds or warrants, the bonds or preferred stock which carry these conversion or subscription privileges should first be offered to stockholders. If they accept the offer, the amount to be sold elsewhere, to bankers or to investors direct, is reduced. To the extent that stockholders do not take the new securities, they can then have no valid ground of complaint that their proportionate interest in the company is reduced by the sale or issue of new stock. But if the offer is not made, and convertible bonds are sold direct to bankers without giving *every* stockholder of record the right to participate in the new issue in the ratio of his ownership interest, the new issue might not be legal.

Objection has been made to this view that, by their action in authorizing the sale of convertible bonds, stockholders waive their right to participate in the stock privileges of the issue. Such a right, however, is fundamental, embodied in the original contract between the stockholders and the corporation, and it cannot be waived by any indirect method. It must be specifically surrendered, if surrendered at all, and by each stockholder. The action of the constitutional majority cannot operate to deprive any stockholder of his fundamental right to retain his proportionate interest in the corporation.

A recent illustration of the care taken in these matters is the recommendation of the Diamond Match Company, which proposed to sell, on preferential terms, a large amount of stock to companies which handled their products, that Diamond Match stockholders should *ignore* the offer of this stock first to be made to them by the company, in view of the great benefit which they would gain from the affiliation of other interests by the sale to them of this stock.

Specific waivers of this right to subscribe to new issues, leaving directors free to dispose of new stock as they see fit, have also been noticed in recent incorporations, indicating a belated recognition of the existence of this fundamental right of the stockholder which, of course, cannot be insisted on if it is formally surrendered in the fundamental contract between the corporation and its members.

The recent attempt of the British General Electric to sell stock on preferential terms, well below the market price, to British stockholders, excluding American stockholders from the privilege, aroused great resentment in the United States, based on the violation of their legal rights which the proposal involved. The American Stockholders' Committee took the stand that their right to participate in the new issue was paramount to every other consideration, even to the necessity alleged in justification of the actions that the highest interests of the British corporation demanded its control by British citizens. In this connection, it is not denied that Parliament, by appropriate legislation, may restrict ownership in British companies to British citizens, and that this action could operate to deprive foreigners of voting and subscription rights in such companies. Such legislation is taken under the general right, in the public interest, to amend, or even revoke the charter.

Position of Stockholders When Stock Is Issued for Property

The same rule of law would seem to apply when stock is issued for property. Even if the stockholders, by the constitutional majority, authorize the issue of stock for property which is valuable to the company, and which cannot be obtained except in exchange for stock, unless, and to the extent, that the stockholders so assenting to such issue of stock for property, expressly, in the form of their assent, surrender their right to participate in the new stock, the purchase of the property may be considered as an

infringement on the rights of stockholders. It is true there are decisions in the state courts—the latest in Maryland—which appear to take the issue of stock for property out of the operation of the general rule, that new stock must first be offered to stockholders of record. But it is difficult to see how, if things that are equal to the same thing are equal to each other, if the stock sold for money with which to buy property must be offered to stockholders, that stock issued directly for property must first be offered to them. The reason in the one case is the same as in the other, the right of the stockholder to preserve his proportionate interest in the company. Stockholders not voting for the issue of stock for property should not be deprived of their rights by the action of the majority.

Danger of Exploitation of Minority Stockholders

Such issue of stock for property can be used to dilute to the vanishing point the interest of the original stockholders. In such matters stockholders usually follow directors' lead, and accept their recommendations. For example, a large and influential stockholder in a paper manufacturing company might own or option certain water powers which he had not funds to develop. By allying himself with the large stockholders whom he might admit to participation in the gains of the undertaking, he might be able to kill two birds with one stone: to sell his water power for stock of the manufacturing company and, at the same time, establish himself and his friends in a large majority control. In such a case, stockholders interested only in the manufacturing company, while unable to block the purchase in any other way, could, by insisting on an offer of the new stock for cash to all stockholders, retain their proportionate interest. The law should protect stockholders' rights even though, through ignorance or indifference, they allow the directors to toss them away. In a case like the above, where a practice long continued was

used to dilute the stockholders' interest in a corporation, and where the plain intent of the directors is to so dilute it, relief could probably be found in a court of equity in spite of the fact that the long-continued practice sanctions the ignoring of the rights of stockholders when stock is issued for property.

In order to make this important point entirely clear, we must remark that the stockholders' right to participate in new issues is limited to a *refusal* of the new stock. In order to retain his proportionate interest, he must *buy* his share of the new issue. If he refuses to subscribe, he cannot complain if other men step into his shoes.

"Dilution" of Value of Stockholder's Privileges

The same question is frequently raised, when warrants are issued in series corresponding to successive issues of stock, the first warrants, for example, carrying the right to subscribe to new stock at $30 a share, the second at $25 a share, and the third at $20 a share, the price being reduced because of the condition of the company or the condition of the stock market. Arrangements are always made in such cases to lower the subscription prices on the earlier issues, and this, as expressly stated, is to prevent any "dilution" of the stockholder's interest. The same protection is given the stockholder in the event of stock dividends, or split-ups which may reduce the market value of the shares.

A method of selling stock below par, even though the law apparently prohibits such a sale, when the issuing company has a surplus, is first to declare a scrip dividend, making the scrip exchangeable for stock at par, then offering stock at par to the stockholders who may pay for it with the scrip.

Advantage to a Company from Selling Stock at a Premium

When stock sells at a high premium, new issues may be offered at a price above par. In case the market value

of the stock is realized by offering stock at a premium, a smaller number of shares need be sold to obtain a given amount of capital than if stock is sold at par. Suppose, for example, that $1,000,000 is required by a company whose stock can be sold at 150, paying 10 per cent dividends. If the stock is sold at market value, 6,666 shares will be needed to obtain the $1,000,000 necessary. If it is sold at par, however, 10,000 shares will be required. The amount necessary to pay the 10 per cent dividend on 6,666 shares is $66,666, while on 10,000 shares $100,000 would be required. If the stock is sold at a premium, $33,333 of annual dividends, assuming that the 10 per cent rate is continued, can be saved for the company, below the dividend payments which must be made if the stock is sold at par. As a result, the rate of dividend can perhaps be increased, and the price of the stock advanced on the strength of its larger dividend returns.

In view of these facts, the directors may decide that they should make the best bargain for the company, that the stockholder shall derive no advantage as a subscriber from his position as part owner of the corporation; that he should be treated as any other investor. Furthermore, under the plan of selling stock at a premium, no more stock will have been issued than is necessary to provide the amount of money required. The higher the price of the stock ascends, borne up on the rising flood of dividends, the smaller will be the number of shares to be sold to obtain the same amount of money. The Pennsylvania Railroad Company, for example, has received large sums as premiums on stocks sold. Without these premiums, which were invested in the business, the outstanding stock of the Pennsylvania might have been materially greater than it now is.

On the other hand, if stock is sold at par, or at less than market price, the corporation must issue a larger number of shares than would be required to furnish the desired capital if the market price was obtained. It may be impossible,

on account of the issue of this extra stock, to do more than maintain the regular dividend, and the price of the stock, therefore, may not advance to the point which it would reach did the directors sell at the best price they can get.

In the case of public service corporations, the principle has been established that they shall not be allowed to earn more than a fair return on the value of their property (usually 7-9 per cent). In some states also, a corporation may not increase its stock beyond the amount necessary to secure funds for capital expenditures. In Massachusetts, for example, the issue of all bonds and of any increase of stock in excess of the original capital is limited to such amount as the railroad commissioners shall, after a public hearing, determine will realize the sum which has been expended on the property and which is to be restored to the treasury out of the proceeds of stock sales, or the sum which will be reasonably required by the corporation for new construction.

As a rule, however, a company whose stock sells at a premium does not attempt to obtain any part of the premium by a public offering, but offers its stock to its owners at par.

Profits on Privileged Subscriptions—How Realized

The stockholder receiving the privilege can avail himself of it, either by selling his right to subscribe to the stock, which is made assignable for the purpose; or, by selling a certain portion of his holdings after he receives the evidence of his right to subscribe, at the market price, replacing these shares at par out of the new issue; or, he can retain his stock and take the new shares as well. In the first two cases: the sale of the assignable right to subscribe, or the sale at the market price of an amount of stock equal to that to which the stockholder is entitled to subscribe at par—he makes a profit which equals the market

premium of the stock, times the number of shares which he sells. Since the right to subscribe at par will ultimately only be purchased by a prospective stockholder, its price is less than the difference between par and market value. Unless the intending subscriber can obtain his new stock at a lower price by purchasing a right which he then exercises to obtain new stock, he will prefer to buy the stock direct.

Method of Calculating the Return on High Dividend Stock Sold at Par

If the stockholder is unwilling either to sell his right to subscribe, or to part with any of his stock, the privilege apparently gives him an opportunity to increase the return he receives on his investment. Suppose he has purchased the stock of a company paying 6 per cent dividends for $150. His return is 4 per cent. The company, within five years after he has purchased the stock, offers to stockholders the privilege of subscribing to new stock at par to an amount equal to 80 per cent of their holdings. This stockholder, instead of selling the right to the stock, prefers to increase his investment on the favorable terms offered. At the end of five years, he owns 180 shares on which the annual return is $6 per share, or $1,080, on an investment of $23,000, or 4.7 per cent. There is little doubt that this is the course followed by the majority of stockholders when privileges are offered to them.

By the correct method of computing the yield on investments, however, the return on a stock should be obtained by dividing into the rate of dividends, not the cost price, but the market price. An investor who takes advantage of a privilege to buy a 6 per cent stock for $100 per share which is selling on the exchange at $150, has only a 4 per cent investment, since a share of stock represents to him $150 of capital and $6 of income. The investor, however, usually estimates the re-

turn by comparing the cost of the stock with the rate of dividend, and this belief influences him to hold fast to stock, new issues of which are occasionally sold to stockholders at less than market value. In no other way could the failure of shares to show heavy declines after the announcement of privileges be explained. Some decline is usually experienced following the announcement of a privilege, but it is seldom sufficient to warrant the conclusion that a large number of stockholders are disposing of their shares. There is no reason for them to do so if they have confidence in the value of the stock since they can take their profit at any time by selling, at a premium, stock which they purchased at par.

Advantages to the Corporation in Selling Stock to Existing Stockholders

When a corporation proposes to increase its stock, the directors must keep in mind not merely the amount of money which the new stock will bring, but the effect of the issue upon the composition of the stockholding body; the necessity that the subscription should be a success and that the money should be promptly forthcoming; the desirability of being able to obtain capital from the stockholders when required, no matter what the condition of the money market, and to any amount that may be necessary; the justice and expediency of extending to stockholders more liberal treatment in the matter of subscription than they extend to outsiders; and, finally, the fact that the sale of a privilege is equivalent to an increase in the rate of dividends.

Advantage of Permanence in the Composition of the Stockholding Body

Let us take up these considerations in order. The sale of stock at a high premium means that new interests are brought into a company, and that its stockholders are con-

tinually changing. Existing stockholders, many of whom will have purchased the stock at much lower prices than those prevailing at the time an attempt is made to secure a premium from a new issue, will have no inducement, other than their general confidence in the company, to increase their holdings at higher prices than those which they previously paid. While a large amount of a new stock issue may be taken by existing stockholders, much of it will be sold to outsiders. These new interests may have their preferences for directors and officers, and their influence may disturb the management and control. When, however, stock is sold at par with a valuable privilege attached, based on the existence of a high premium in the market, the stock is very closely held. Little is offered for sale, since the stockholder of record knows that, from time to time, in addition to the yield on the stock represented in the dividend paid, he will have an opportunity to increase his holdings on more favorable terms, or, if he desires, to gain an immediate profit in one of the ways described.

The firm holding of stock which is increased by privileged subscription is the more certain because the values of stock privileges are not, as a rule, fully expressed in the market price of the stock. If a corporation would announce that, on January 1st of each year, its stock would be increased 10 per cent, and that stockholders of record would have the privilege of subscribing to the new stock at par, in proportion to their holdings, the value of the privilege would be expressed in the market value of the stock, which would be established on a permanently higher level than the cash dividend, in the absence of these assured privileges, would warrant. No such assurance, however, can be given to the stockholders. The directors will follow the policy which seems best at the time. They cannot limit themselves in the methods which they will employ for raising new capital. It is impossible, therefore, that these privileges should be counted upon as a regular source of profit. They

are incidental gains to the stockholder, which he has every reason to believe he will receive in the future as in the past, but which will not be fully reflected in a higher market value of the stock, although it is true that the market price of a stock which has been favored by privileged subscriptions, is usually higher on that account. To gain the full value of these privileges, the stockholder must retain his shares. Corporations which have granted valuable privileges have a body of stockholders whose membership changes slowly.

Directors place a high value upon permanence in their stockholding body. Stockholders of long standing can be counted on to support the management. In the unlikely event of a contest for proxies, the limited supply of such a stock makes it very difficult and expensive for an outside interest to buy control. One of the most serious difficulties experienced by Mr. Harriman in his contest for the control of the Illinois Central in 1907, was the firmness with which most of the individual stockholders supported Mr. Stuyvesant Fish's administration.

Risks Involved in Offering Stock at High Prices

Another argument in favor of selling stock at par to stockholders of record is that the securing of a premium on the sale of a large amount of stock is an uncertain matter, depending on the condition of the stock market, which may change overnight. Here is another argument for the privilege subscription. To make sure that a premium will be secured, the services of an underwriting syndicate may be necessary. The Pennsylvania Railroad, for example, in 1903, offered $75,000,000 of stock to holders of record at $120 a share. The stock was at that time selling above 150. No difficulty was anticipated in selling the stock to the Pennsylvania stockholders. A general decline in stock values, however, set in, which carried down the value of the Pennsylvania stock with it. As the price went down,

the directors feared that the stock might fall below the subscription price before the date when the subscriptions were to be made. In this event the credit of the company would have been seriously damaged, since the subscription offer would fail. No matter how loyal the stockholders were, they would not pay the company more than the market price for the new issue.

To guard against such a misfortune, an underwriting syndicate was formed headed by Speyer & Company, which, in return for a commission of $2,250,000, agreed to take from the company any of the $75,000,000 of stock at the subscription price of 120 a share, which the stockholders should not take. The announcement of the formation of this syndicate steadied the price which had at one time fallen to 114½, and the syndicate had to assume only a small part of its obligation, making a large profit on the transaction. The Pennsylvania Railroad is probably the strongest railroad corporation in the world, and its stock is highly esteemed by investors. On this occasion the stock was offered far below the market price, and yet the securing of a premium was only made possible by the intervention of an underwriting syndicate.

On the other hand, a corporation whose stock sells at a high premium, and which offers new issues to stockholders at par, is never at a loss to obtain new capital funds. During 1906, when the bond market was seriously depressed, and when the strongest railroad and industrial corporations, rather than sell long term bonds on a 5 per cent basis, were resorting to the expedient of short term notes paying 5 and 6 per cent interest, four of the largest railroad companies—the Great Northern, the Northern Pacific, the Chicago, Milwaukee & St. Paul, and the Chicago & Northwestern—raised about $300,000,000 from their stockholders, by the sale of stock at par. If they had gone into the bond market, it would have been difficult for them to obtain this amount of money at reasonable rates. They might have paid

for three years an interest rate of at least 6 per cent on notes issued in anticipation of the sale of the bonds.

The sale of stock on a privileged basis to holders of record is fair to the stockholder who does not care to increase his investment, and who would not be able to share in any of the benefits of the new issue, if it were offered at a premium. Such stockholders receive their rights to subscribe, which they can sell in the manner already explained, and in this way share in the benefits of the high and assured earnings which made the premium possible.

Sale of Stock below Market a Method of Distributing Surplus

The issue of premium stock at par to stockholders is an indirect method of distributing the company's surplus in the sense that a larger distribution must be made in dividends than if this has been sold at a premium. A corporation which obtains $1,000,000 by selling 10,000 shares of stock at par, when it could have obtained the same money by the sale of 6,666 shares at 150, is assuming a larger dividend burden than is necessary to obtain the money. Its stock capital is 3,333 shares larger than it would have been had the full market price been obtained. The dividend rate cannot be increased as rapidly as though a smaller number of shares had been sold to obtain the amount required. For this reason, the sale of privileged subscriptions by public service corporations has been criticized. There is a tendency in public sentiment to compel these companies to sell their stock at the highest market price obtainable, and not to favor stockholders by the sale of stock on preferential terms.

Position of the Interstate Commerce Commission on Privileged Subscriptions

The law takes no account of the market value of stock. It merely requires that the par value should be paid in

cash, and in the absence of a special statute or ruling to the contrary, the corporation has authority to sell its stock at par. Furthermore, market value, as already shown, is unstable and uncertain. The realization of a given profit by the sale of a privilege, which, as we have seen, is a course adopted by only a portion of the stockholders to whom privileges are offered, is a doubtful matter. The Interstate Commerce Commission, in the case of the City of Spokane *v.* Northern Pacific Railway Company, considered this question of the return from privileged subscriptions, in reaching a conclusion as to the earnings of the Northern Pacific. The complainants in this case asserted that the Great Northern, one of the defendants in the case, had distributed its stock, from time to time, in such a manner as to give its stockholders large profits in addition to their dividends, and insisted "that this manner of selling stock is vicious and unlawful, and that, in determining the return to these stockholders, we must have in mind the benefit conferred upon those stockholders by this operation."

The commission, however, rejected this view as follows:

> Assuming, without deciding, that the complainant is right in its position that this practice is both unlawful and unwise, how can we, in this proceeding, take any practical note of what has been done? This stock is selling today, upon the market at something less than $120 per share. If the original stockholder has retained and now owns his stock, he paid $100 in the beginning, has received a regular dividend, and now owns his stock at the above advance. While the profit to him has been a handsome one, there is certainly nothing here which would call for a penalizing of the stockholder. Suppose, now, that, instead of retaining the stock, the stockholder sold the same to some innocent purchaser, who paid the market price, and who has continued to own the stock from then until now. This present stockholder paid perhaps $264 a share for his stock. He has lost $144 per share. Should we, for that reason, compel him to sustain a further loss? The manner in which this stock has been manipulated may furnish a strong argument against the propriety of permitting the

sale of new stock in this manner, but so far as this particular company and the stock already issued are concerned, the transaction is ended, and can be given no practical consideration in determining what rates shall be charged by the Great Northern Railway Company.

The commission in 1928 reversed its former position temporarily when it refused permission to the Chesapeake & Ohio to sell stock at par in order to finance the purchase of the Pere Marquette stock. On a renewal of their application, however, the sale at par was allowed.

The practice of issuing privileged subscriptions, without restrictions, will not, in all probability, be continued by the public service corporations. Railroad companies since the War have mainly relied upon bonds as a source of capital funds. Only since 1924 have stock prices advanced so as to bring up the question of privileged subscriptions. With the more rigid control now exercised by public service commissions, including the Interstate Commerce Commission, over security issues, however, directors will probably be required, when selling new stock, to obtain the highest possible price. This does not, however, mean that stockholders will no longer be favored with opportunities to subscribe on preferential terms, but merely that the value of the preference may be reduced. If a public service commission is required to authorize an issue of stock selling at a premium, and to name a price at which the stock can be sold, unless they wish to take the responsibility for a possible failure of the subscription, they will not insist that the corporation should attempt to obtain the full premium ruling at the time the offer is made. Some lower figure will be named, and at this figure the stockholders of record will be allowed to purchase.

Sale of Stock to Customers

Another method is the successful effort of public utility companies, beginning about 1918, to sell securities

direct to their customers, in this way making their customers their partners. The purpose of such policies is not only to obtain money at lower cost than bankers' commissions, but to build up a public following among the citizens which can be appealed to, and aroused in defense of their own interests, if the public service corporation is attacked. In 1921, for example, the Public Service Corporation of New Jersey began a series of campaigns to sell its preferred stock to the customers of its subsidiary companies, which increased the number of stockholders from a few thousand to 55,253, at the end of the fifth year. In one day, April 1, 1926, 19,829 shares of 6 per cent preferred stock were sold to 4,085 subscribers. It has been found possible to sell preferred and even common stocks of many utilities to customers on terms quite favorable to the issuing company, much more favorable, in fact, than could be obtained from bankers for securities of a much higher grade. One important reason for this success is the availability of the employees of the companies, especially those of a higher grade, as salesmen, and the unusual contact of the community with the service which the company renders.

Utility companies in recent years have disposed of large amounts of preferred stock to their customers by the agency of those employees who come into direct contact with the public. The last report of the Public Service Corporation of New Jersey, for example, contains the following paragraph, describing its policy with regard to customer ownership:

> Increase in the number of stockholders is in large part due to the successful sale under our Customer Ownership plan, of $5 CUMULATIVE PREFERRED STOCK WITHOUT NOMINAL OR PAR VALUE. An offering of this stock was made on October 1st, and in spite of the fact that the return thereon is lower than on any of the preferred stock previously offered, and that the form *"Without Nominal or Par Value"* was new to most of the purchasers, 14,675 subscriptions, including those made under the

preliminary offer to stockholders, were received for 49,272 shares. This successful sale may be taken as another indication of the confidence of New Jersey people in Public Service Securities and of the splendid coöperation extended by our sales organization, made up of regular employees of operating companies.

Customer ownership conciliates public opinion. It also creates stock equity on the strength of which the company may be able to obtain more favorable terms on bond or preferred stock issues from bankers. Customers are natural buyers of securities of the companies which supply them. The plan is apparently limited to utilities, where an extensive cultivation of a local field brings results.

Employee Ownership

Employees' ownership is partly philanthropic, partly politic in motive. It is not to be relied on as a source of capital funds, but merely as a means of establishing friendly relations between the company and the management, and to reduce the turnover of labor.

Perhaps the most successful illustration of employee ownership is furnished by the Coöperative Association of the Philadelphia Rapid Transit Company. In the company's publication, *Service Talks*, for December 17, 1926, appeared the following: "The Corporation Trustees have purchased this year 25,000 shares of Philadelphia Rapid Transit stock at a cost of approximately $42.00 per share, after crediting dividends received thereon and paying four quarterly dividends, aggregating 12 per cent. This brings the total P.R.T. stock in the possession of the coöperative wage fund to 221,500 shares, which, added to the 10,000 shares owned by the Coöperative Association, gives P.R.T. employees ownership of more than one-third of the workshop where they earn their daily bread." The method employed by Mr. Mitten in the P.R.T. employees' plan has this peculiar feature, that the stock is not owned by employees direct, but by the Association in which the individ-

ual worker owns an interest.[1] When the stockholder employee dies or leaves the service of the company, the value of his interest is paid to him or his estate. This feature insures that employee stockholders will not be transformed, by death or departure, into absentee stockholders.

What P.R.T. employees have done, the employees of any industry, if properly organized and encouraged, can do. A small fraction of the wages of each railroad or mine employee invested in the stock of his company, would quickly roll up into a huge sum, and would transform the wage-worker into an owner-worker, toiling not for a soulless corporation, owned by the "idle rich" but for a company owned, and in large measure, controlled by the workers.

The Managers Securities Company

A recent modification of the employee ownership plan applied to executives which has been put into effect on one plan and another, by many corporations, is the Managers Securities Corporation of the General Motors Company soon to be succeeded by a General Management Company organized on similar lines. This company is owned by a limited number of the company's higher executives. After 7 per cent is earned on the capital of the company, 5 per cent of the balance is paid to the Management Corporation. In 1928, this amount, divided among 80 stockholders of the Managers Securities Company, was $12,408,594. A second management corporation is now in process of formation, which will take the place of the first at the end of 1930. This company explains the benefits of this plan as follows, in the 1928 report:

It is essential, in developing a personnel of the degree of ability required to cope with the Corporation's tremendous operating

[1] This stock has since been exchanged for stock in an investment trust, the Mitten Bank and Security Company.

and financial problems, that the more important executives should be placed in a position, from the standpoint of financial reward, comparable to what they would occupy were they conducting a business on their own individual account.[2]

The corporation also distributed, during 1928, 195,570 shares of $10 common stock as bonus rewards to 2,513 employees for "conspicuous service."

The danger in admitting employees to partnership lies in the possibility of a suspension of dividends. In such an unfortunate event, goodwill would quickly turn to hatred and the last state of the corporation will be worse than the first.

[2] Owing to the severe decline in earnings, this second management company was not established.

CHAPTER XXXIV

NEW CAPITAL: STOCK VERSUS BONDS

From the standpoint of the corporation, wherever a junior issue can be sold, the issue of first mortgage bonds is usually to be avoided. Mortgage bonds are senior securities. When junior securities can be sold, first mortgage bonds will be held in reserve for future sale. The reason for this preference is a reason of caution. The time may come when the market will take only first mortgage bonds, when a resort to the use of senior credit offers the only way out of an embarrassing situation. It is of importance, therefore, to keep the senior line of credit open. A similar situation exists in commercial borrowing. When money is easy and commercial paper in demand, a well-managed concern will obtain its requirements in the commercial paper market, leaving its regular bank credit lines open. Then, when money tightens, and commercial paper is hard to sell, resort is had to the banks. Because they have had the company's deposits during periods of easy money, the banks are under a moral obligation to take care of its requirements when money is scarce. So, in the long term capital market, if debentures without special security, "plain bonds," can be sold at a fair price, they are sold, and available first mortgage bonds are held back for emergencies. The investment banker favors this selection for two reasons. He can make a higher commission on the sale of junior securities, and when this market vanishes, he is glad to have high-grade first mortgage bonds to offer.

Protection Given to Debenture Holders

Debentures, as we have seen in Chapter V (Part I), can be well protected by various covenants. The application of the proceeds can be controlled. New issues can be limited in the same way as issues out of a mortgage bond reserve, to a percentage of the cost of property acquired, or they can be protected by stipulations that a certain margin of earnings must be maintained, or by the requirement that a given percentage of the amount must be kept in liquid assets. Debentures can be made more attractive by conversion or stock purchase privileges and they sell, of course, at attractive prices. When the bankers insist upon the requirement that new mortgages must protect existing debentures, there is this obstacle to subsequent senior financing that the amount of bonds authorized under the mortgage securing the senior issue must be made large enough to include the debentures. But this restriction is not always insisted on. It is really opposed to the interest of the debenture holders, since mortgage financing is sometimes the only way to avoid a receivership. When an emergency arises, they can sometimes be persuaded to waive this covenant in the interest of necessary senior financing. Even if the covenant is not waived, debentures usually carry sinking funds, and, if the sinking fund has been in operation for a considerable time, a margin has been built up for financing with first mortgage bonds, which will take in the debentures.

Collateral Trust Bonds

The use of debentures, secured by collateral—collateral trust bonds—has already been explained in Chapter VII, Part I. The large investment holding companies, such as the Van Ness and Allegheny Corporations, organized by the Van Sweringen interests, have made large use of this device in expanding the control of railroad properties. When the dividends and value of stock holdings are

increasing, the use of the collateral trust bond releases the equity in these stocks for later financing since the collateral deposited as security for the bonds produces an amount of income which is greater than the amount required to pay interest on the bonds. This surplus is available for dividends on the stock of the holding company which issues the bonds.

Stock Financing Now Favored over Bond Issues

As between bonds of any kind, and stock, if the condition of the market permits, the standard practice now favors stock. If it is possible to obtain money on reasonable terms by the sale of stock, the risks of business, especially in industrials, are too great to expose a company to the hazards of fixed charges for interest and sinking funds.

In times past, and, in fact, until the year 1925, the sale of bonds, when earnings were ample and stable, was favored, because of the lower cost. Public utility or railroad bonds could be sold at a cost to the borrower of 5 to 5½ per cent. Stock with the par value limitation often could not be sold at par, and so could not be sold. The investor was primarily a bond buyer, interested in security of principal and income, and not particularly concerned with the market price of his investments, save that they did not decline in value. This attitude has changed radically since 1925. With the rapid increase in values of the stocks of large corporations, such as United States Steel, General Motors, and American Telephone & Telegraph, with entire industries, such as power and light and gas, steadily increasing their profits, and with new industries, chemicals, radio, automobile accessories, chain stores, making huge returns for their owners, the American security-buying public turned *en masse* to stocks and away from bonds. The amount of bonds sold during this period rapidly diminished, and stocks have taken their place.

Statistical Proof of Change

The following table, which gives the total corporate issues during the six months ending June 30, for five years, shows this change from bonds to stocks.

Year	Long Term Bonds and Notes *	Stocks, Including New Capital and Securities Issued for Refunding *
1929	$1,872,199	$3,487,134
1928	2,666,437	1,590,056
1927	2,804,247	887,004
1926	1,917,982	764,535
1925	1,722,552	578,541

* 000 omitted.

The great change from bonds to stock has taken place since 1927. The *Commercial and Financial Chronicle,* from which the above figures are taken, makes the following comment:

Explanation Found in Increase of Corporate Profits and Stock Values

Examination of the details of these hugely enlarged corporate issues reveals in preëminent degree the characteristics and features for which the current period of financing has become far famed, namely, a falling off in the bond issues and a tremendous increase in the new stock issues. New bond issues have been coming upon the market in diminishing amounts for the two-fold reason that the demand for bonds has dwindled and that corporate managers have wished to avoid raising rates of interest to the extent necessary to ensure a certain market for the same, while on the other hand stock issues have been resorted to in ever-growing amounts because of the public craze for such issues owing to the supposed valuable equities attaching to the same.

The outstanding reason for this shift in investment favor is the extraordinary advance in earnings and stock prices. A list of 50 representative large companies in various major industries compiled by the National City Bank shows the following movement of net profits.

1900	$149,000,000
1910	217,007,000
1920	396,785,000
1929	563,294,000

Stock values have responded to this extraordinary gain in profits. The Boston News Bureau furnishes the table on page 421 showing the appreciation in stock prices from 1923 to the low figures of 1929.

This computation gives full effect to the heavy decline in stock prices during the fall of 1929. It is no cause for wonderment that those extraordinary gains—and the list is by no means exhaustive—should have accomplished a revolution in the security-buying attitude of the American people. Of necessity, the corporations go with the current.

Stock Preference Reflected in Bond Privileges

Par value, the great obstacle to stock sales, no longer interferes. Par value in new issues is not often met with unless required by law. No par stocks can be sold at any price selected so long as a stated minimum value is not set up by the directors. Senior securities, in the form of preferred or A stock, are still marketed by companies whose organizers and bankers wish to keep control, to hold for themselves the lion's share of expected profits, but bonds, save in restricted fields, such as railroads, high-grade utilities, real estate, or mineral properties, are issued in declining amounts. The recent preference of the investor is for stocks, equities, participations in future profits. This attitude is reflected in the bond and preferred stock provisions. Few bonds are now issued without the privilege of conversion into stock, or without the inducement of stock purchase warrants. When bonds are issued, there is a growing tendency to attach convertible provisions or stock subscription warrants to meet the popular demand for participation in the supposed growing value attaching to the equity contained in stock issues.

APPRECIATION IN STOCK PRICES, 1923–1929.

NAME OF COMPANY	APPRECIATION, IN POINTS	APPRECIATION, PER CENT
Air Reduction	159	220
Allied Chemical	85	76
Allis Chalmers	89	175
American Can	409	382
American Locomotive	34	23
American Smelting	117	170
Amer. Tel. & Tel	65	50
American Tobacco B	161	101
Anaconda	17	32
Atchison	90	86
Baltimore & Ohio	45	75
California Packing	40	46
Chesapeake & Ohio	76	90
Consolidated Gas	91	132
Corn Products	120	75
DuPont	412	278
General Electric	470	235
General Motors	46	271
Gillette Safety Razor	84	29
Hudson Motors	19	59
International Harvester	162	165
International Tel. & Tel	88	124
Kennecott	53	118
Liggett & Myers B	161	71
Loew's, Inc	19	90
Montgomery Ward	23	88
Nash Motors	286	251
National Biscuit	88	169
New York Central	53	49
North American	42	175
Otis Elevator	237	155
Packard Motor	67	446
Paramount-Famous-Lasky	12	13
Public Service of New Jersey	111	218
Radio Corporation	22	550
Reynolds Tobacco B	46	61
Southern Pacific	11	12
Standard Oil of N.J	4	9
Union Carbide	110	164
Union Pacific	56	39
United Fruit	60	32
United States Steel	97	80
Western Union	36	30
Westinghouse Electric	43	64
Woolworth	23	8

The following table of large bond issues, taken from the *Commercial and Financial Chronicle,* put out during the first half of 1929, shows clearly the tendency to admit bond buyers to participation in expected profits.

ISSUES FLOATED IN 1929 WITH CONVERTIBLE FEATURES OR CARRYING SUBSCRIPTION RIGHTS OR WARRANTS

$35,000,000 Allegheny Corporation coll. trust conv. 5s, 1944, floated in January, each $1,000 bond being convertible to Feb. 1, 1944 into seven shares of 5½% preferred stock (without warrants) and 10 shares of common stock.

$25,000,000 American International Corp. conv. deb. 5½s, 1949, offered in January, convertible to Dec. 31, 1934 into common stock at prices ranging from $80 to $100 per share.

750,000 shs. Chicago Corporation $3 cum. conv. preference stock, brought out in February, convertible at any time into common stock, share for share.

$36,000,000 Utilities Power & Light Corp. deb. 5s, 1959, offered in February, carrying warrants entitling holder of each $1,000 debenture to purchase to Feb. 1, 1934, 7 shares class A stock, 3½ shares class B stock and 3½ shares common stock for the total sum of $577.50.

$35,000,000 Commercial Investment Trust Corp. conv. deb. 5½s, 1949, offered in February, convertible to Feb. 1, 1935 into common stock at prices ranging from $200 to $240 per share.

$50,000,000 Cities Service Co. deb. 5s, 1969, sold during March, with warrants entitling holder of each $1,000 bond to purchase 40 shs. of common stock to March 1, 1932 at prices ranging from $30½ to $37½ per share.

$30,800,000 Philadelphia & Reading Coal & Iron Co. conv. deb. 6s, 1949, issued during March, each $1,000 bond being convertible from March 1, 1930 to March 1, 1939 into 40 shares common stock of the Philadelphia & Reading Coal & Iron Corp., the parent company.

$35,000,000 Eastern Utilities Investing Corp. deb. 5s, 1954, offered in March, each $1,000 bond carrying war-

rant to purchase 20 shs. class A common stock at $15 per share from Jan. 1, 1930 to Dec. 31, 1934.

$30,000,000 International Hydro Electric System conv. deb. 6s, 1944, sold in March, each $1,000 debenture being convertible from April 1, 1930 to April 1, 1939, into 19 shares class A stock.

$65,166,000 Southern Pacific Co. 4½s, 1969, originated during April, each $1,000 bond carrying warrant to purchase to May 1, 1934, three shares of common stock at $145 per share.

$46,392,000 Missouri Pacific R. R. Co. conv. 5½s, 1949, offered in April, convertible on or after May 1, 1931, into 10 shares of common stock for each $1,000 bond.

$30,000,000 American I. G. Chemical Corp. conv. deb. 5½s, 1949, issued in April, convertible to Dec. 1, 1938 into common A shares on bases ranging from 17 shares to 10 shares of stock for each $1,000 debenture.

$219,000,000 American Tel. & Tel. Co. conv. deb. 4½s, 1939, offered in May, convertible into stock from Jan. 1, 1930 to Dec. 1, 1937 at prices ranging from $180 to $200 per share.

500,000 shs. United Light & Power Co. $6 conv. cum. 1st pref. stock, brought out in May, each share being convertible to July 1, 1934 into 2 shares of class A common stock.

$32,000,000 Lautaro Nitrate Co., Ltd. 1st mtge. conv. 6s, 1954, issued during June, each $1,000 bond being convertible to July 1, 1939, into 10 shares 7% pref. (dollar) shares of the company and 4 shares common stock of the Lautaro Nitrate Corp. the parent concern; each $1,000 bond also carries warrant to receive without cost on Jan. 1, 1930, 10 shares of common stock of the Lautaro Nitrate Corp.

$40,000,000 Shell Union Oil Corp. 5½% cum. conv. pref. stock, sold during June, convertible into common stock at $30 per share up to July 1, 1932 and at $35 per share thereafter to July 1, 1935.

250,000 shs. General Gas & Electric Corp. $6 cum. conv. pref. stock issued in June, convertible from May 1, 1930 to May 1, 1935 into 1⅛ shares of common stock class A.

Participation in Profits Demanded by Bondholders

The bond buyer, though he may demand mortgage security, now is inclined to insist upon the right to share in profits above interest and, of the two forms of participation — conversion or purchase warrants — the preference is growing for the warrant. By receiving stock purchase warrants, the bond buyer, if expectations of profits are realized, can keep his bond, which grows more valuable as it grows more secure, and either sell his warrant or exercise it to buy the advancing stock.

The argument from the company's standpoint (which formerly favored the choice of bonds) that the bond buyer surrendered participation in profits other than his fixed rate of interest, has broken down, due to this change in the investors' attitude.

By selling bonds or preferred stock—the argument is the same for both—with returns limited to fixed amounts, the stockholders keep for themselves the growth in profits. Their share in earnings will not be lessened by the admission of new partners. The bondholder, in return for security in principal and income, made no claims to share in increased profits. This has been changed by the new development. The bondholder of today may continue to be a bondholder tomorrow, but he may be a stockholder as well by exercising his warrant.

The consideration of greater marketability which formerly influenced corporations to select bonds rather than stocks as a means of providing new capital, is no longer controlling. Stocks can readily be sold if the proper inducements are offered, and, without these inducements, which imply, if the company prospers, that the purchasers of senior securities will quickly force their way into full participation in profits, bonds cannot be sold either. The conclusion is plain, and is now generally accepted, that stock rather than bonds, when market conditions permit, will be selected.

Interest of the Corporation Favors Stock Financing

From the standpoint of the advantage of the corporation, as distinct from its owners, and from the owners' standpoint as well, if they expect to remain owners, the choice between bonds and stock has generally favored stock. A company without debt is a company that is solvent, and solvency is the principal thing. Modern industry, no matter how well protected by supposed monopolistic advantages, is subject to such revolutionary changes in methods and markets that the introduction of fixed interest obligations which carry sinking funds as well—another form of fixed charge—should, if possible, and in the absence of weighty advantages in the contrary policy, be avoided.

The railway equipment companies furnish an illustration of the benefits of a capital structure in which bonds and notes are reduced to a minimum. None of the larger equipment companies have issued many bonds, and it is fortunate for them. American Locomotive, Baldwin, and American Car & Foundry have been operating for years, near or below the deficit line. They have been paying dividends out of accumulated surplus, fortunately for them held in liquid form, and they are holding on in the hope of better times. With large fixed charges, even such charges as United States Steel has paid, these equipment companies would have been in serious difficulties.

The managing owners of large companies fully appreciate the danger of bond issues. When opportunity serves, they sell stock and retire their obligations. The United States Steel Corporation, for example, by July, 1930, had retired most of its bonds, even buying the largest amount at a high premium. No principle is more thoroughly established than the superiority of stock over bonds from the standpoint of the ultimate interest of the corporation.

If senior securities are put out, preferred stock or A stock is available, usually issued, however, with conversion

or common stock purchase features. As shown in Chapter IV of Part I, senior stock can be given protection, which approaches, in the way of enforcing conservative policies upon the management, the security of the bond.

Reason for Low Yields of High-Grade Bonds

The investment advantages of bonds over stocks are not as great as commonly believed. To begin with, the interest rate on bonds usually is less than the rate of dividends. This is mainly due to the laws which limit the investments of insurance companies, savings banks, and fiduciaries to mortgage bonds, a limitation dictated by considerations of safety, but which concentrates a large amount of buying on the senior secured issues and enables them to be sold at low rates. There is visible a sentiment in favor of relaxing these rigid restrictions to include certain junior bonds such as collateral trust bonds, and also to change the restriction excluding bonds of companies which have not paid a given rate of dividend to include the bonds of companies with a reasonable margin of earnings over fixed charges, irrespective of the disbursement of these earnings in dividends. This retention of profits is, of course, no detriment to the bonds. No serious effort has been made, however, to include stocks in the favored list although suggestions have been made looking to such a change.

Stocks Well Protected by Earnings Substantially Equivalent to Bonds

There can be no question that, in the case of any given company, the income on bonds is more secure than the return on preferred stock, and the payment of dividends on preferred stock more certain than the common dividends. This follows from the serial priority of the claims of the three classes of security holders. This advantage of bonds over stocks in prosperous and well-managed com-

panies is not, however, of as great importance as might appear. The established dividends of well-managed and profitable companies are usually well protected by large investments out of profits in plant and in current assets. When the capital structure contains a large percentage of bonds, dividends are by no means so well secured as is interest, especially interest on bonds secured by first liens on indispensable portions of the property. Whenever, due to special and exceptional circumstances such as the decline in railway traffic from 1929 to 1932, corporations are forced by decreasing revenues to suspend dividend payments, the catastrophe endangers interest on junior mortgage bonds. During the last two years most of the large railroad companies, with proper allowance for maintenance, have not earned the interest on all their bonds. Many of them have been saved from receivership by advances from the Reconstruction Finance Corporation. Their junior bonds have fallen to receivership prices. Savings banks and insurance companies withdrew their support from the railroad bond market. To companies in this situation, a greater reliance on stock instead of bonds, even upon high dividend preferred stock, would at this time have proven to be a wiser policy than their extensive borrowing. From the standpoint of safety, the experience of the last two years has been conclusive and convincing that stock should be given greater weight as a means of providing new capital. We now have a new depression yard-stick which should serve for some time to measure the upper limit for corporate fixed charges.

Mortgage Bonds Give No Protection in the Absence of Earnings

The basis of investment value is earnings. Given the necessary earnings, all securities—first mortgage bonds, second mortgage bonds, debentures, preferred stock, and common stock—are good. Only when earnings decline so

much as to endanger the return on the junior securities, does the preferential position of senior securities, bonds, and preferred stock, become important. It is well to emphasize and illustrate this point because the fixed belief of investors in the superiority of bonds, just because they are secured promises to pay, has sometimes been responsible for heavy losses. The bondholder fondly believes that, because he is the owner of the property, he is secure. But this property which secures his bonds is specialized property. Its value depends on the profits from a highly specialized business. These profits, as we have shown in detail in a former chapter, are primarily dependent on a wise and energetic development of a business opportunity. If the opportunity fades or the management fails, the holders of first mortgage gold sinking fund bonds, protected by all the devices that legal ingenuity can furnish, will find small consolation when they are forced to take over the property and assume the burdens and risks of management.

Illustration from a Coal Mining Company

A recent illustration of this fact, too often overlooked, that the real security of bonds is not property, but earnings, is furnished by the statements which accompany the reorganization plan of the West Virginia Coal & Coke Company.

This company, which was incorporated in 1924 as a reorganization of a company of the same name, organized in 1917, owns and controls 26,900 acres of coal lands and coal rights underlying 89,000 additional acres, together with coal leaseholds of 40,000 additional acres, containing about 800,000,000 tons of *recoverable* bituminous coal. It operated, in 1924, 40 mines with an annual output of 3,500,000 tons, and it employed 3,000 men. Its mines were well equipped, and it enjoyed the immense advantage of non-union labor with a $5.00 wage scale as compared with $7.50 in the competing union fields. Its assets were valued at $31,000,000, against which as a *prior lien* were $7,000,000

of 6 per cent, 25-year mortgage bonds. These bonds were further protected by a sinking fund of 5 cents per ton on all coal mined and shipped during the first 5 years, 7 cents during the second 5 years and 8 cents per ton thereafter. Minimum annual payments under this sinking fund were $250,000 during the first 5 years, $300,000 during the second 5 years and $350,000 thereafter. The mortgage securing these bonds was closed. No additional bonds could be issued. Surely here was the ultimate in bond security. An immensely valuable property, producing a necessary raw material at low cost, with the entire property back of the bonds.

Explanation of the Default

On May 9, 1929, the court decreed a sale of the property for the benefit of the bondholders and the company is to be reorganized.

The statement of the committee follows in part:

The Industry. The bituminous coal industry is in a period of readjustment, not only in this country but abroad. The readjustment was caused by the excess production developed during the World War coupled with the growing use of substitutes, such as fuel oil and electric power. There have also been developed many economies in the use of coal, thus further limiting demand. The readjustment has been prolonged by frequent strikes, which have tended to keep alive the inefficient mines and the competition they furnish. In this country the situation has been further complicated by changing freight rates and the unsettlement of markets thereby caused.

Results of the Readjustment. The readjustment has brought two developments. The first has been a constantly declining price for soft coal. Lower prices have brought lower earnings, if not deficits, and as earnings are the support to property values there has been a serious decline in the values of bituminous coal properties.

The second development has been the growth in the demand for a better product. It is now necessary to produce cleaner and better prepared coal than ever before.

Both of these developments make necessary the investment of

new capital. The low prices must be met by the introduction of such cost-reducing machinery as has been proved efficient, and the facilities for good preparation must be provided.

Future of the Industry. It seems likely that low prices and the necessity for the investment of new capital will ultimately force many mines to close. It is also probable that economies in the use of coal cannot be extended as rapidly as in the recent past. In time competition should become less severe and the natural growth of the country be reflected in a growing demand for coal. How long it will take to complete the readjustments is impossible to determine, and it would be dangerous to reorganize any soft coal company on the theory that improvement is near at hand.

Situation in West Virginia. The mines of the West Virginia Coal & Coke Co. are all in the State of West Virginia. They have been under the same influences as the industry generally. But West Virginia mines have also to face two new problems. As non-union fields, they formerly had an advantage over several other important fields which were operated by union labor. This advantage has been lost with the gradual change to non-union conditions elsewhere and the wage reductions made in union fields. The second problem arises from the fact that there has been a change in freight rates on coal shipped to the Great Lakes in favor of the mines of Pennsylvania and Ohio. This makes it necessary for West Virginia mines to sell at lower prices in order to hold their markets.

It is not difficult to understand, from such developments as the above, the change which has come over the investor in his attitude toward mortgage bonds. These West Virginia properties, for example, were enormously profitable during and after the War. Their owners drew large sums in dividends. Then they obtained new capital, when the cream had been skimmed from the proposition, by selling first mortgage bonds. The bondholders are now faced with the offer of 40 shares of new common stock for each $1,000 bond, with the option of paying $1,240 for a unit of $1,000 bond and 24 shares of stock, to furnish the company with $2,000,000 of *additional new* capital, so that a new management may make an earnest effort to retrieve its fortunes.

Investment for profit is never devoid of hazard. The investor may be safe in 4½ to 5 per cent yield from underlying mortgage bonds of railroad or utility properties, or mortgages on central real estate, or public bonds. When he ventures beyond these, he sets sail on the stormy sea of business hazard where the rewards are great to the successful, but the risks of failure are numerous and terrifying. It is no wonder that, since he cannot avoid the risks, he has apparently determined to demand a share in the profits.

It is going too far to predict that there will be no return swing of the pendulum back to bonds and away from stocks. The business depression, with falling stock values, will undoubtedly bring bonds into favor when conditions make possible the sale of securities. After all, bonds have a prior claim to earnings. This they share with preferred stock. They have the further advantage that their mortgage security gives them, after the wreckage of disaster has been cleared away, whatever of value then is left, be it much or little. These considerations, during a period of depression, are controlling. The marked preference for stock may be only a passing phase. Bond financing may again occupy first place. But no matter what may be the future division between bonds and stocks, in the choice and favor of the investor, nothing can be more certainly predicted in any forecast of future financial practice, than that, by conversion features and stock purchase warrants, bondholders will participate over their interest, in corporation profits, if any such there be.

CHAPTER XXXV

SPECIAL FORMS OF LOANS

In Part I the standard type forms of bonds were described and their uses briefly indicated. At this point, under the general heading of new capital, we shall consider a variety of loans which are generally used as a means of obtaining new capital by established corporations, but which may, of course, be included, as they often are included, in the original capital structure.

Security for corporate obligations is usually furnished by real property in the form of plant, or personal property in the form of stocks and bonds. In the first case, the title to the property is conveyed by mortgage to the trustee for the bondholders, while in collateral loans both the physical possession of the property and the recorded title pass to the trustee during the life of the loan. Suppose now that the directors wish to go further in their borrowing and pledge personal property necessary to the business while still retaining the use of this property. How can this be accomplished?

Defects of the Chattel Mortgage

The chattel mortgage is generally legal—it is illegal in Pennsylvania, although in this state conditional sales are now permitted by law. Under its provisions, the title to a block of merchandise, or a number of cattle or hogs, or a fleet of motor trucks is conveyed to a trustee, as security for a loan, while the possession of the property remains with the borrower. The borrower agrees that the goods or machinery shall be held as the property of the lender,

and when sold, that the proceeds shall be paid to the lender. Failing payment of principal and interest, it is agreed the lender shall take possession of the security by the usual legal process and have it sold to satisfy the claim.

The chattel mortgage is not a desirable form of security. Physical possession of the merchandise and the ostensible title remain in the borrower who may convert the proceeds of the property to his own use, or his other creditors, having no legally sufficient knowledge of the prior lien of the chattel mortgage, may obtain possession of the security. To answer these objections, various ingenious plans have been devised, notably in Pennsylvania where chattel mortgages are illegal, by which companies may borrow on the security of personal property with safety to the lender. Two of these methods will be described: (1) the car trust loan, issued under the Philadelphia Plan; and (2) the loan on the security of merchandise and accounts receivable, and the straight commodity loan using a conveyance of title and physical possession to a trustee, as a means of securing the creditor.

Bonds Secured by Assignment of a Lease

The lease is used by railroad companies to borrow money for the purchase of equipment under an obligation, known as the car trust certificate. By this method, property acquired serves as the security for the bonds, and they are also the direct obligation of the railroad company. This method of borrowing may be illustrated by the issue of the Lehigh Valley Car Trust Certificates, Series G. A syndicate, headed by E. T. Stotesbury, a leading Philadelphia banker, was organized to purchase and pay for a large number of passenger and freight cars. E. T. Stotesbury then executed an agreement whereby, in return for certain payments, and on the basis of certain covenants and stipulations, he leased to the railroad company the equipment which he had purchased, and which is carefully

enumerated and described. The Lehigh Valley Railroad Company, for its part, in return for being allowed the use of the cars, agreed to pay $203,398.80 before the equipment was delivered to them and half yearly the following sums: first, a sum equal to 4½ per cent on $800,000 to be reduced from time to time by 4½ per cent on money paid by the railroad company in reduction of $800,000; second, a sum equal to all expenses incurred by the lessor in enforcing the covenants and terms of the lease; third, a sum equal to the taxes which the lessor might be liable to pay; fourth, yearly the sum of $100,000, making in all eight annual payments of $100,000 each.

The deferred payments were evidenced by equipment notes, the substance of which is as follows:

The Lehigh Valley Railroad Company hereby acknowledges itself to be indebted to the bearer, or registered owner hereof, in the sum of $1,000 with interest at the rate of 4½ per cent per annum. This certificate is one of a series of 800 for $1,000 each issued under the terms of a lease between E. T. Stotesbury and the Lehigh Valley Railroad Company.[1]

Additional Covenants of the Lessee

In addition to these payments, the railroad company agrees to keep the cars in good repair, to replace any which may be destroyed; to mark the name of the owner plainly upon the cars, and to furnish him each year a list of the equipment; not to sublet the equipment, and, in case of default under any of the provisions of the lease, to deliver to the lessor his equipment. The lessor on his part agrees that, after the payments have been completed, he will, upon the payment by the railroad company of the additional sum of one dollar, transfer to the railroad company, as its absolute property, all the railroad cars held under the lease. The rental referred to in this agreement consists of three parts: First, a sum of cash which

[1] Only the essential portions of the Car Trust Certificate are given.

is usually considered to represent the expenses and profits of the syndicate acquiring the equipment; second, a sum which represents the purchase price of the equipment payable in installments; and third, interest on the unpaid installments of the purchase price.

The Lease as Security

E. T. Stotesbury, having now purchased the equipment, and having leased it to the Lehigh Valley, assigns the agreement as security for the certificates evidencing the deferred payments under the lease, to the Girard Trust Company substantially as follows:

First, that the said E. T. Stotesbury hereby assigns unto the Girard Trust Company as trustee for the holders of the certificates hereinafter set forth, all the right, title and interest of said E. T. Stotesbury in and to a certain indenture of lease bearing even date herewith made by the said E. T. Stotesbury to the Lehigh Valley Railroad Company.

Second, the said trustee covenants and agrees that it will certify and deliver to Drexel & Company [for whom Stotesbury is acting] for distribution to the several subscribers to the said Lehigh Valley Car Trust Fund eight hundred certificates in the following form [given above], which certificates shall be delivered in amounts and at times corresponding to the value and the time of delivery of the various lots of said railroad cars by the said E. T. Stotesbury to the Lehigh Valley Railroad Company. All of which certificates, when and as issued, shall be entitled to the security of all such railroad cars previously and subsequently delivered by said Edward T. Stotesbury to the Railroad Company under the terms of said indenture of lease of even date herewith.

These certificates were numbered consecutively from one to eight hundred and were payable in eight installments.

Covenants for the Protection of Certificate Holders

The agreement for assignment of lease, to which the Lehigh Valley Railroad Company is made a party, provides in detail for the protection of the holders of these certifi-

cates by the trustee. In case of any default in the payments under the lease, or the breach of any other covenant by the railroad company, the trustee is authorized to take possession of the cars, and to hold, or lease, or otherwise dispose of all or any part of the equipment in such manner as he may deem beneficial, and also to recover from the company, for future accruing rent, any deficit which may remain after the sale or lease of the equipment, and the application of the proceeds to the claims of the certificate holders.

The Conditional Sale Plan

Equipment can also be purchased under the conditional sale plan, title remaining in the manufacturer until the purchase price is paid, and certificates evidencing beneficial interest in these payments can be used to finance the purchase. The conditional sale plan does not give equal security with the lease since, with the lease, there is no passing of title. The difference, however, is not important except when the lessee company goes into the hands of a receiver, and if the equipment is leased, the receiver must pay the rentals or run the risk of losing the equipment.

Strong Position of Equipment Trust Obligations

From the foregoing, the strong position of equipment trust obligations is evident. They are, in fact, debenture bonds of the railroad, with the additional security of a title to railway equipment. They have the further advantage, explained in a former chapter in connection with the discussion of serial bonds—that their margin of security constantly increases, since the equipment is in existence at the time the last bond matures. Equipment trust obligations usually bear higher rates of interest than first mortgage bonds issued for long terms. They also yield higher returns to the investor than first mortgage bonds, while the security which they offer is practically perfect.

The Guaranty Trust Company of New York, in a circular dealing with the advantages of the equipment trust securities, summarizes these advantages as follows:

> The equipment of a railroad corporation is essential to its operation. It is the tool with which the railroad handles its business. If an individual mechanic becomes bankrupt, his tools are ordinarily exempt from seizure on the ground that possession of the tools is necessary for the mechanic to obtain his livelihood and ultimately satisfy his creditors. In the same way the courts, both state and Federal, have ruled that the necessary equipment of a railroad must be preserved for the Receiver of a bankrupt railroad in order to enable him to operate the railroad; and have generally placed the charges of principal and interest of equipment obligations upon an equality with charges for wages, materials and other operating expenses, and in priority to interest of, even, first mortgage bonds.

Explanation of Strong Position of Equipment Trust Obligations

The record of equipment obligations secured by lease issued by railroad companies which have subsequently gone into bankruptcy, confirms this favorable judgment. With few exceptions, even by companies where all other bonds were reduced in interest rate or principal, the installments of the principal and interest on equipment bonds have been paid in full. This strong position in insolvency of equipment bonds is due to the fact that their security is not the property of the insolvent corporation. The cars and locomotives which secure the equipment obligations are the property of another who has leased his equipment to the railroad company on certain definite conditions. Unless these conditions are met, the equipment can be hauled off the company's lines and sold. Property which is owned by the company can, as we shall see in a later chapter, be put out of reach of creditors within the protection of the court. The court, however, can have no jurisdiction over property not belonging to the bankrupt corporation. The receiver, no matter if he defaults on the first mortgage bonds, must

pay the interest and principal of the equipment trust obligations.[2]

Use of the Lease by a Subsidiary Company as Security

The equipment trust bond represents the most familiar use of the lease as new capital. Another method is to organize a subsidiary company in the interest of a company desiring to obtain capital. This subsidiary company constructs or purchases the equipment or other property needed by the parent company, issuing its own first mortgage bonds which may be guaranteed by the parent company. The property is then leased to the parent company for a rental sufficient to pay the interest on the bonds and to retire their principal after a term of years. In some cases, the rental is made sufficient to pay dividends on the stock of the subsidiary company. After the bonds of the subsidiary company are retired, the property, upon the payment of a nominal sum, passes to the parent company. For the greater protection of bondholders the subsidiary company assigns to the trustee the lease, out of whose rentals the money to pay the interest on the bond must come. If the rental is not paid, then the interest cannot be paid, the bonds are in default. The trustee can then sue the lessee company either upon its obligation of guarantee, in case it has indorsed the bonds of the subsidiary company, or under its contract of lease.

Use of the Leasehold as Security for Bonds

A third use of the lease as security is by the lessee company. The lease, being a contract for the use of certain

[2] During the present depression the investment position of equipment trust issues has remained remarkably strong. Even though there can be no question of losing possession of the equipment in case of default—no other company under present conditions would be likely to buy it—the companies have continued to pay the equipment rentals, and the prices of these equipment trust certificates have ranged much higher even than the prices of direct obligations with much better security. Such is the force of habit upon investment opinion.

property on the payment of certain sums, may be expected to show a surplus to the lessee over the amount of the rentals. This surplus makes the leasehold interest, the value of the annual profits of the lessee, a valuable right which can be pledged by the lessee like any other thing of value as security for bonds.

Illustration of Bonds Secured by Leasehold

In recent years in long term financing and when the margin of earnings over rentals is large, the lessee company capitalizes on the basis of its leasehold interest, treating the lease as a fixed charge and capitalizing the profits on the lease as a sum of value on which bonds and stock can be issued. An illustration is furnished by the $5,500,000 of 6 per cent bonds which were issued, in 1927, by the Roosevelt Hotels, Incorporated, of New York. This is an extreme illustration of the possibilities of leasehold financing. The property on which the Roosevelt Hotel stands is owned by the New York Central and the New York & Harlem Railroads. The owners lease it to the New York State Realty and Terminal Company, which, in turn, leases to the Roosevelt Hotels, Incorporated. The lessor company advanced $3,000,000 to apply on the construction of the building which, of course, became a part of the real estate, only the right to use passing to the Roosevelt Corporation—the subtenant. This $3,000,000 is to be paid back to the landlord in installments as a part of the rental. There is a mortgage on the property of $2,500,000, the obligation of the lessor. The rental includes $280,000 plus certain taxes and charges, plus interest and sinking fund on the $2,730,000 balance out of the $3,000,000 advance above mentioned. The position of the Roosevelt Company, then, is as follows: it is a subtenant, obligated to pay a large rental to a tenant, which, in turn, must pay rentals to the owners as well as interest and sinking fund on a mortgage of its own. This lease of the tenant antedates

the lease to the Roosevelt Corporation, as does the mortgage. If the New York State Realty & Terminal Company, the tenant, defaults on its own lease, the owners can take the property. The same is true of the bondholders if the New York State Realty and Terminal Company defaults on its $2,500,000 mortgage.

Position of Leasehold Bondholders in Case of Default on Lease

In either case, the Roosevelt Corporation would forfeit its lease. The matter is not so serious, however, as, at first sight, it appears. There is no danger of such defaults as long as the hotel continues profitable. At the date of issuing these debentures, the earnings for the preceding twelve months, over the rentals, were $1,038,255. In case the Roosevelt's landlord, the tenant of the New York Central, should default on either rental, interest, or sinking fund of its own obligations, the Roosevelt Corporation could step into its place, and pay these charges, offsetting such payments against its own rental obligations. While the hotel continues to make money, the bonds of the hotel company, secured merely by a lien on a subtenancy leasehold interest, are good. The leasehold interest was valued at a net amount of $6,770,000 with an additional value of $2,500,000 for goodwill. It should be remarked, however, that much difficulty was at first encountered by the bankers in selling these bonds, since the investor approached could not easily follow the complexities of this involved situation.

Inferiority of Leasehold Property as Security for Loans

A leasehold property is inferior to fee simple property as security for bonds. The tenant has an estate just as the owner has, but his estate is subject to many conditions. He must pay rentals, taxes, assessments, and all other charges in the lease. He must carry out franchise obligations if his property is operated under a franchise. He

must keep the property insured and in good repair. If he neglects any of these duties, his lease may be declared in default. As for the owner, all he need do is to pay taxes and discharge franchise obligations. The bondholder, secured by a leasehold, if he forecloses his mortgage, merely succeeds to a variety of obligations which perhaps the tenant bond debtor had difficulty in discharging. The bondholder, secured by a mortgage on property, becomes, on foreclosure, the outright owner of the property.

An illustration of the dangers that often lurk concealed in leasehold property is furnished by the condemnation proceedings, terminated in 1927, against the Jefferson-Belle Isle Realty Company. This company owned and operated a bridge over the St. Clair River near Detroit. The bridge was located on property leased for 99 years with the provision that the lease should be canceled if the property was condemned by the city. This condemnation took place, in fact, condemnation proceedings had been started before the bonds were sold, but the bankers who sold the bonds said that they had no knowledge of this fact, and the jury of award gave no recognition to the value of the lease. Such complications as this sometimes make leasehold property undesirable as a basis for a bond issue.

The Revolving Fund

Personal property in the form of merchandise and accounts and bills receivable can also be made to serve as security for loans by placing them in possession of the lender's representative, in a revolving fund.

A revolving fund is a sum of value whose total amount does not diminish although its composition may be constantly changing. In order to operate this device successfully, the property comprising the fund is transferred to a trustee. The property is then sold and the cash or obligations—the proceeds of the sale—are turned over to the trustee who delivers the property on the order of the buyer.

This cash is invested in new mechandise which is shipped in the name of the trustee and the collections are deposited with the trustee. The trustee's object and duty is to maintain the fund intact, surrendering merchandise or cash only where accounts, cash, or merchandise is received to an equal or greater value with that which is delivered.

This method of borrowing is superior, from the standpoint of security, to the method of the chattel mortgage because the trustee of the lender has at all times physical possession of the full amount of the security.

Illustration of the Operation of the Revolving Fund

In 1902, the Lehigh Valley Coal Company desired to borrow $3,000,000 on the security of its stock of mined coal and its accounts and bills receivable, and to make the loan for a period of years. A summary of the indenture by which this purpose was accomplished through the instrumentality of a trustee is as follows:

1. *Coal Company* assigns to Trustee all mined and prepared anthracite coal or the proceeds thereof. Trustee to certify bonds to extent of 75 per cent of value of coal, etc., not exceeding $3,000,000.

2. If the *Trustee* shall doubt solvency of any coal purchasers other accounts shall be substituted by Coal Company.

3. *Coal Company* may substitute for coal, accounts, etc., securities satisfactory to Trustee.

4. *Coal Company* may redeem at any interest period at 102½ and interest.

5. *Coal Company* appoints Trustee its exclusive Mercantile Agent for all anthracite coal.

6. *Coal Company* shall make leases or assignments of leases of land on which coal is stored for Trustee.

7. *Coal Company* shall immediately deliver to Trustee a full statement of coal, coal accounts, and cash.

8. *Coal Company* shall fix price for sale of coal.

9. *Trustee* shall hold coal, accounts, and cash for security of bondholders to pay interest when due, and bonds at maturity.

10. *Trustee* shall sell coal at price fixed by Coal Company but not be responsible for such sales.

11. *Coal Company* may demand and receive from Trustee cash proceeds of sales when remaining margin is sufficient.

12. *Trustee* shall keep accounts and after deducting salaries and expenses pay balance to Coal Company.

13. *Trustee* may insure all coal.

14. All *money* and *property* of Coal Company in hands of Trustee—pledged to secure bonds.

15. *Bonds* at no time to exceed 75 per cent of amount of coal, coal accounts, and cash. In case of default—Trustee to withhold cash, or Coal Company may redeem bonds by purchase, or by lot at 102½ and interest.

16. Copies of daily *reports* rendered to Trustee shall be open to inspection of bondholders.

17. *Trustee* assumes no liability except for distribution of moneys in his possession.

18. When all bonds are paid *trust* shall terminate.

Here is a true revolving fund. The trust company at all times held, actually owned, ample security for the bonds, even to the extent of controlling the ground on which the coal was stored. Through this reservoir of value flowed the entire income of the Coal Company. Out of it, but only when filled to the brim with security, overflowed a stream of cash into the treasury of the Coal Company. The bonds were perfectly secured because the Trustee had at all times sufficient money and convertible property to pay them in full. The Coal Company was in no way inconvenienced because it carried on its business as the agent of the trustee, and the holder of these bonds was perfectly protected.

This method can be adopted when security issues, either bonds or preferred stock, are for the express purpose of providing working capital. By setting up a revolving fund such as described above, the bankers can make sure that the money will not be diverted from its express purpose and that the assets will always be liquid.

There is a certain objection to the revolving fund. If the notification plan is used, that is, if the debtors of the company setting up the fund are notified that their obligations are the property of a trustee and that they are to make payments either directly to the trustee or to the company as agent for the trustee, this fact is quickly broadcast by the commercial agencies, and the company's credit is gone. Even if notification is not given it is impossible to keep the fact secret. To set up a revolving fund, therefore, is to go on a cash basis. On the other hand, failure to notify, unless special precautions are taken, may weaken the security of the fund, since subsequent creditors, pleading no notice, might attempt in the event of bankruptcy of receivership to establish a lien upon the current assets. With proper precautions and reasonably close contact between company and trustee, the danger that outside creditors will establish a claim to the fund is not serious.

Underwriting Agreements as Security for Loans

The use of underwriting agreements in connection with collateral loans has already been touched upon. As a device to assure and secure a lender, the underwriting or conditional purchase agreement has a very wide application in purchasing property for resale. Buyers usually prefer that the property should finance its own purchase, if possible, by furnishing security for as large a loan as can be obtained. Banks must be careful in these matters. They look not only to the ultimate but to the immediate value of the collateral stock or bonds of a small new company. A mining property, an apartment house, a ship,

each may be worth the amount which the bank is requested to lend on them, but perhaps several years will be required to realize that value.

If it is necessary to sell collateral, the bank wishes to find an immediate market and to know the price ruling in that market. Such a market the assigned obligations of underwriters provide. Each one agrees to buy a certain amount or interest in the property. Their agreement may be supported by collateral if demanded. These agreements, assigned to the bank, give reasonable assurance that, if the collateral must be sold, there will be purchasers ready, if not willing, to buy it.

CHAPTER XXXVI

CONSOLIDATION OF CORPORATIONS

Consolidation of corporations is a joining together under one corporate control of two or more separate and individual companies, uniting in this manner the capital facilities and consolidating their profits.

The subject of consolidation of corporations is considered under the head of new capital because consolidation is a favorite method of enlarging the scope of a company's operations and the amount of capital which it controls.

Advantages of Consolidation

The principal advantages of consolidation are as follows:

1. The expansion of business without new construction.
2. The control of markets by limiting the number of competing concerns.
3. The reduction of operating expenses by increasing the volume of business which can be handled with a given amount of general expense, or by dispensing with sales agencies or duplicated inventory.
4. In the railway field, the control of traffic.
5. The building up of equities which can serve as the basis of new capitalization.

These are benefits of consolidation as such: the gains from uniting two or more corporations under a single control.

A manufacturing company may desire to buy the market for its product or the raw material of its product or an interest in the bank in which its funds are deposited, or

the finance company which handles its installment sales, or the steamship line or railroad which carries its products to market. A railroad company may wish to control terminal facilities in a large city, or a connecting steamship line, or other railway lines which will shorten its hauls, reduce its operating expenses, or open new sources of traffic. A city may have too many banks for the business offering, or too many restaurants or retail stores. In each case, consolidation is indicated.

The advantages of consolidation must be distinguished from the advantages of big business. A business may grow to enormous size, as the Ford Motor Company has grown, without consolidation, by the investment of profits. On the other hand, the General Motors Corporation, the Irving-Columbia Trust Company, the Chatham Phenix National Bank & Trust Company, the United States Steel Corporation, the Consolidated Gas Company of New York, or the North American Company are examples of consolidation where new companies are formed out of existing materials, or where, with an established company as a nucleus, other concerns are added to it, forming a much larger enterprise. Consolidation has played an important part in the growth of most large American companies. It is, in fact, exceptional to find a company of the first rank which has not grown by accretion.

The Remington Rand Company

We take up the objects of consolidation in the order indicated above. First, the expansion of business without new construction.

The Rand-Kardex Bureau, Incorporated, was the largest manufacturer and distributor of filing, record-keeping, and record-protecting devices. Its products include modern visible filing equipment, steel and wood filing cabinets, office furniture, indexing systems, safes and safe cabinets, guides, folders, and filing supplies. It had over 1,000,000

customers and its line included 4,000 items. The Rand-Kardex Company was a consolidation of four concerns in this line. The company desired further expansion into the production of calculating machines and typewriters, and also to eliminate the competition of a large company in its own line. Two methods were available to the Rand-Kardex Company, which was a prosperous and growing concern. They could develop a line of typewriters and calculating machines, marketing them through their own agencies, and pushing them into a market already crowded with these devices. They could also continue their competition with the Baker-Vawter Company, which specialized on loose-leaf accounting devices and supplies, cutting prices and engaging in several trade wars, the outcome of which would have been doubtful. If successful, the Rand-Kardex Company would have continued to grow, and, after perhaps many years, would have reached a position where its net earnings before Federal Taxes and interest would have amounted to $7,716,378, the combined earnings of the companies concerned.

The road to this goal, however, was steep, rough, and dangerous. Price cutting, loss of employees to enterprising competitors, patent litigation, duplication of agency and service facilities, duplication of advertising expense presented an uninviting prospect, especially since a quick, comfortable, and easy road to the same goal lay open before them.

Absorption of Typewriter, Calculating Machine, and Filing Equipment Lines

Instead of developing a line of typewriters, the Rand-Kardex Company absorbed the Remington Typewriter Company, using a new corporation name, The Remington Rand Company, for the purpose. The Remington Typewriter Company had a record of 53 years, and possessed a complete line of standard, noiseless, electrical, tabulating,

portable, and bookkeeping typewriters, sold through 1,000 sales offices. Instead of developing a line of calculating machines, the Remington Rand Company absorbed the Dalton Adding Machine Company, whose product includes over 150 models for practically every computing need of business, including adding and calculating machines, the direct subtractor and multiplex ledger posting and statement machines. Finally, instead of continuing their competition with the Baker-Vawter Company, the Remington Rand Company absorbed it also—thus attaining at one bound, by the process of consolidation, a dominating position in the field of office appliances, absorbing an immense value in patents, several thousand experienced salesmen, and goodwill representing the expenditure of many millions of dollars in advertising. Instead of increasing competition, competition is to some extent reduced. Instead of building up departments, with all its multifarious troubles —legal, mechanical, distributive—these departments are taken in, ready for operation.

Advantages of Horizontal Consolidation

The Remington Rand Company is an example of horizontal consolidation, the union of concerns which operate in either competing or complementary lines. The advantages of horizontal consolidations lie in the increased size, which may result (1) in a reduction in overhead, (2) in modifying the rigors of competition, (3) in important economies in purchasing, and (4) in standardization of methods and equipment.

These advantages are illustrated by the large holding companies, which exert a dominating influence in the industrial field, and, so far as production is concerned, in the public utility holding company. These companies, such as Associated Gas & Electric, North American Company, United Gas Improvement Company, Cities Service Company, and Northern States Power, group under one con-

trol large numbers of utilities operating both in large and small communities. It is not going too far to state that the entire public utility business of the United States, outside a few of the large cities, either controls, or is controlled by, a few large holding companies.

The Associated Gas and Electric Company

The scope of this control may be illustrated by the Associated Gas and Electric Company. The holdings of this company are mainly concentrated in three areas, eastern and western Pennsylvania, and western New York. The scope of its influence, however, is constantly growing and has extended into Canada, South Carolina, Florida, and the Philippine Islands. Sixty of the more than one hundred controlled companies are public utilities serving a population of over 4,000,000 in over 900 communities, located in 20 states, and the Dominion of Canada. The company also controls a large production of oil and natural gas. All of this large business, whose consolidated earnings in 1929 were $69,903,253, is controlled by the company which stands at the apex of the pyramid, Associated Gas and Electric. We shall have later occasion to study the financial structure through which this control is exercised. For the present, however, we are confined to an enumeration of the business advantages of this type of horizontal consolidation which serves, in general, to illustrate the advantages of all the others.

Local, as Distinct from General, Functions

In the management of any number of companies operating in the same general field, two classes of functions may be distinguished. First, those which are local to each community, *e.g.*, in a gas or electric plant, the employment of labor, the day-to-day operation of the plant, the keeping of records, the collection of money, making new service installations, and routine dealing with public authorities.

These routine functions must be performed on the ground by each local manager for each local company, and the more the local manager is left to function on his own responsibility, untrammeled by directions from some distant central office and judged solely by results, the more successful will he be.

A second group of functions is common to all the concerns operating in an industry, *e.g.*, gas or electricity: the engineering of betterments and additions, the handling of rate matters with public authorities, the construction of rate schedules, the cultivation of new business, the purchase of materials, and, of primary importance, the raising of money. These functions are far from routine, although, in time, they may become more or less standardized. They require, for their successful performance, a high order of ability for which only large companies can afford to pay, but which, when once secured by the central organization, can be placed at the disposal of a hundred plants, lowering operating costs, improving quality of produce or service, and increasing the earnings of each one of them.

Financial Service Performed for Subsidiaries

The first of these functions is finance. The earnings of public service corporations are limited by law to a "reasonable return"—in practice, to 7 or 8 per cent as a maximum on a "fair value" of the property employed in the public service, the rate allowed varying with the risk of the several enterprises. With the rapid growth of cities and towns, utility plants must be constantly and rapidly extended. Limited earnings will not furnish the necessary funds even if no dividends were paid, and all profits put into extensions. For example, the Bell System in 1928 spent on new construction $428,700,000 and its total net income was $143,170,000, from which dividends and interest were paid. Constant additions of capital funds from

the sale of securities are, therefore, necessary. These public utility companies may be divided into two classes, the large companies whose position is so strong that they can easily obtain the required money at the minimum rates, and the companies serving towns and medium-sized cities, whose needs for expansion are relatively the same as the needs of the large companies, but which, because they are small and unknown, are forced to pay high rates for their money. When these small companies are taken into a large holding group, such as the Associated Gas & Electric or the United Gas Improvement Company, the parent company makes such advances to its subsidiaries as are necessary, takes their bonds or stocks into its own treasury, and sells its own securities to the investor to obtain reimbursement of its advances. When these subsidiaries are strong, the parent company may dispose of the securities directly to bankers, or they may use them as the basis of an issue of collateral trust bonds, or, the most recent method, illustrated by the recent practice of the Associated Gas & Electric, the parent company may sell its debenture bonds, keeping the securities received from the subsidiaries in return for advances, free in its treasury, available for use in case unsecured plain debentures cannot be sold on as favorable terms as collateral trust bonds.

In the difference between the cost of the money to the parent company, and what they can properly charge the subsidiaries, the holding companies find another opportunity for profit. There is nothing unfair in this, as long as they lend money to their subsidiaries at lower rates than the subsidiaries could borrow for themselves. A higher rate would, of course, be a ground for criticism and possible interference by the public authorities. It is not unreasonable to suppose that, so far as is legitimate and proper, of which the holding company officials are the judges, the affairs of the subsidiaries are conducted with a view to the profit of the holding company.

Technical Supervision Service

The second service performed by the utility holding company is the supplying of technical supervision. The holding company can afford to employ the best engineers and research men obtainable, whose services are there at the disposal of every subsidiary no matter how small. A service fee is usually charged for this work, which is an addition to the operating expenses of the subsidiary but which usually is far below the value of the service, and far below what the subsidiary would pay if it employed these experts on its own account.

Purchasing, Public Relations, Central Power Supply, and Research Services

The parent company also functions very efficiently in the purchase of supplies, materials, and machinery, obtaining these at prices below what a small company would be charged, and making substantial savings in their operating costs. Some of these large organizations, the Insull Companies, for example, have gone into coal mining on a large scale, operating so-called "captured" mines for the exclusive use of their own plants, whose costs of production, because of the steady calculable demand for their output, are below the costs of mines which sell in the open market, and whose operation, therefore, since it depends on fluctuating orders, is irregular and therefore more expensive. Some of the advantages of these low costs are passed on to the subsidiaries, although there is no obligation on the part of the parent company to do this, since the subsidiaries could be made to pay the full market price.

In the field of public relations, the construction of rate schedules and the marketing of the product or service, the superior service of the holding company is placed at the disposal of every subsidiary. Skilled legal and marketing counsel, commanding salaries out of reach of a small com-

pany, are, by the central organization, placed at its disposal, and the cost to the subsidiary is small compared with the value of the service.

The central organization can function in other profitable ways. It can centralize its power generation into large power houses, where current can be produced at low cost and distributed through many small companies serving a wide territory. A recent development along the same line is the central gas plant, from which gas is distributed in the same manner as electric current.

Research work is expensive. It is coöperative in nature. The solution of any problem requires the work of a large research staff. For example, the American Telephone & Telegraph Company maintains a research department employing, in 1928, over 4,000 technicians. During the year, the annual report states, "more than 75 major improvements in central office equipment were standardized and made available, including a new manual private branch exchange board, a toll tandem board, an automatic residence private branch exchange, and an 1818 pair exchange cable which has 50 per cent more conductors than any previous cable. Approximately 6,000 minor changes, modifications and improvements were perfected to facilitate manufacture, improve operation, or to meet special plant situations." Every telephone company in the nation-wide Bell System has the advantage of all these discoveries and improvements.

Services Performed for Subsidiaries by Industrial Holding Companies

The utility holding company furnishes the best illustration of the economies of horizontal combination. The large industrial combinations, however, have not, on the whole, been as successful in realizing these economies as have the utilities. This is explained by the more rapid changes in methods and equipment, and the relatively small amount

of monopoly power, compared with the nearly absolute monopoly of the utilities, which industrials enjoy. In certain lines, however, engineering and research, purchasing, dealing with railroads, and export trade, these large industrials have realized important advantages from centralized control of the activities of subsidiaries. The tendency in the industrial field is toward decentralization of control wherever that can be accomplished.

Banking Consolidation through Holding Companies

The same method of horizontal consolidation is now being put into operation on a large scale in the field of commercial banking. The ideal form of bank expansion is by the establishment of branch offices, or "branches." English banking has developed on this model. Each branch is in charge of a manager. Branches are grouped into districts and all are controlled from the "Head Office." General policies govern the operations of thousands of branches. This system is cheap, safe, and convenient. Branch banking in the United States, however, is narrowly restricted by law. Only in those states where branch banking is permitted to state institutions, and in the large cities, is branch banking permitted. So the chain or group bank, formed by stock control, is being developed to evade the provisions of the law. A typical organization is the First Bank Stock Corporation, formed in Minneapolis and St. Paul in 1929. This now (September 28, 1929) controls forty-nine banks in the Ninth Federal Reserve District. The consolidation acquired entire, not majority, interests on a share per share basis. The resources of the banks acquired on the above date over $386,769,000. It is stated on behalf of the corporation that banks in this group will retain their local form of organization, and that, with few exceptions, the management will continue unchanged. Bodies of directors from the communities in which the units are situated will govern in

all matters of ordinary policy, subject to the general standards established by the holding company.

Purposes of the First Bank Stock Corporation

The purposes of the organization are set out in another statement issued by Lyman G. Wakefield, Vice-President of the holding company, as follows:

. . . We believe that we have seen this territory retarded in its progress because of an unsettled and unsatisfactory general banking condition brought about through economic conditions and not through the fault of the bankers themselves. As a means of correcting the difficulties of the past, it has seemed that if we could bring about an advisory organization, properly manned and with sufficient banking experience, to offer to all the individual units making up the chain expert advice and assistance in the management of their local banks, that there could be no question as to the benefits that would accrue to the territory as a whole.

Our entire plan of operation has been formulated with the definite intention of retaining in the local community the strongest possible local interest in and control over the affairs of their bank, and the organization of the central office is being set up with two very definite purposes in view. First, the association of these banks will result in examination and supervision and the bringing to bear of trained judgment in the operation of the individual units, which ought to enable them to serve their local communities better than ever before, and ought largely to eliminate the possibilities of undue losses and mistakes such as have occurred in the past and have caused the closing of a number of our Northwest banks.

Second, through the distribution of the holding company stock in small units over the Ninth Federal Reserve District, it offers an opportunity for the people of the district to become financially interested in the banks with whom they are dealing, in a larger way than ever before, and the stock will be so widely spread and held by so many people that it in effect leaves the ownership and management of these institutions primarily in the hands of the people who are most vitally concerned with their management and prosperity. It is, of course, always true that officials of a corporation of this kind are permitted to hold their jobs by the stockholders just as long as they satisfactorily conduct the busi-

ness, but the stockholders always have the power to replace them in case of their failure to conduct affairs satisfactorily.

Advantages of Diversification

One of the strongest arguments for the grouping of banks over such a widespread and diverse territory as the Ninth Federal Reserve District is the increased strength inherent to all through the greater diversification of industry served by the group. Seasonal needs of the many divisions of commerce vary greatly, but each division has a period of peak load in financing requirements. Agriculture, for instance, and this is particularly true in the small grains sections, requires heavy advances during the harvesting and shipping season. These peaks sometimes prove a heavy load on the resources of unit banks in communities of the single industry type. In the same way that diversification of crops brings prosperity and a year-round income to the farming territory, eliminating the hazard of a single source of income, diversification of banking over such a great territory as the Ninth Federal Reserve District will give a sounder foundation to the entire financial structure.

The facts are that any sound-thinking person can readily understand that the association of a group of institutions engaged in the banking business in the Ninth Federal Reserve District could not be undertaken with any idea on the part of those handling the affairs of curtailing credit or moving the deposits of one section into another, to the detriment of the local community. For instance, we have a bank in Vermilion, South Dakota, a good bank with very substantial deposits. It is located in a fine territory, one which will need large banking facilities, intelligently handled. The growth and profits of that institution are entirely dependent upon the proper use of the loanable funds, so far as possible in that community. Were this corporation or any other to concentrate in the Twin Cities, Chicago or New York funds needed for constructive purposes in Vermilion, it would defeat the entire purpose of the group association. It is our intention —and we consider it our obligation—to supervise the administration of the units in our group in a manner that will materially increase their usefulness to the communities they serve. . . .

This organization aims to apply in the field of commercial banking the principles of horizontal consolidation. It will establish general standards of sound banking practice,

and, by examination and control, will see to it that the banks whose stock it owns conform to these standards. Subject to these general rules of policy, individual banks, directed by residents of their several communities, will continue to function.

Objection to Chain Banking Met by Marine Midland Company

One recent bank holding company, the Marine Midland, recently organized with $60,000,000 of capital paid in, has gone further than general supervision and has set aside $32,000,000 in a fund to be kept in cash or readily salable securities, to be instantly available to aid any controlled bank which is in need of assistance. Chain banking, another name for consolidation of banks by holding companies, has been criticized because, it is claimed, the central institution assumes no direct responsibility for safeguarding the member banks, and, in fact, has no funds available for the purpose. With branch banking, where each unit is a department of the bank, this obligation, it is claimed, does not apply. The Marine Midland aims to meet this objection in the manner stated by standing back of each subsidiary bank, with ample funds available to meet any emergency.

Circular Consolidation

A form of horizontal consolidation known as "Circular Consolidation" has been developed in recent years. It is illustrated by the General Foods Corporation and the Standard Brands Corporation. These companies are consolidations of food companies in different lines. The primary advantage, aside from the various advantages of horizontal consolidation noted above, is to enable the company to eliminate the jobber by spreading its cost of sales, just as the jobber does, over a large number of articles which may be sold direct to the retailer.

Conclusion

We may understand consolidation, therefore, as a short cut to the economies and the advantages of big business, a means to the acceleration of the process of mass production and distribution.

CHAPTER XXXVII

VERTICAL CONSOLIDATION

A vertical consolidation unites companies which supplement each other in the relation of producer and consumer, or producer and distributor. By their consolidation, the control of the holding company is extended either back to the raw material, transportation facilities, and intermediate products, or forward through the channels of distribution to the ultimate consumer. Some consolidations, *e.g.*, General Motors, extend in both directions, aiming at a self-contained production unit. The most familiar illustration of vertical consolidation is the United States Steel Corporation, whose origin and structure will be described in detail.

Limitations of Vertical Consolidation

Vertical consolidation in the steel industry stopped with the raw material of other industries. The steel corporation sells its products to machine tool builders, building erectors, automobile manufacturers, manufacturers of agricultural machinery, railroads, public utilities, and a variety of other industries which use steel as raw material of their operations. The Steel Corporation has not, however, gone into these industries either to own or operate. It stops short at the line of rails, sheets, plates, billets, wire, and structural shapes.

The rule usually followed in vertical consolidation is that this method of uniting successive stages in the productive or distributive process is advantageous when the purchasing company can absorb a sufficient amount of an

antecedent product to enable it to realize the full economies of large-scale production by a subsidiary company, or where the purchasing company, by absorbing another company which buys its own product, can control a large market which might otherwise go to its competitors. There is generally no advantage in making a consolidation merely as an investment, although occasional instances of this occur, for example, the control of the Frigidaire Corporation by General Motors.

Vertical Consolidation Depends on the Scale of Operations

Vertical consolidation is favored by every advance in the scale of operations. With the present demand for passenger elevators, for example, it is profitable for the Otis Elevator Company to purchase doors, cages, and grill work from companies who specialize along these lines, and who can sell such material cheaper than the Otis Company can produce it. If the elevator business continues to grow, however, it may reach a point where the Otis Company can absorb the entire capacity of a fabricating plant large enough to operate at minimum cost. When that point is reached, a full consolidation with a fabricating company would be advisable which could then be operated as a "department" or "division" of the Otis Elevator Company. There is no economy, for example, in a small steel company buying a large iron mine. The transaction would place upon the steel company the burden of selling a large surplus of iron ore. It would then be in the iron mining business as an investor. For a large steel company, however, such a purchase would be profitable since the entire selling expense of the iron ore company could be dispensed with, and its energies could be confined to production on order. In the same way, a sugar refining company burning 100,000 tons of soft coal cannot profitably buy a coal mine with an annual capacity of 300,000 tons. The sugar company does not wish to go into the coal business. If,

however, the sugar company amalgamates with two or three others, so that its coal demand rises to 250,000 tons a year, a merger with a coal mine might be advantageous.

Purchase Sometimes Cheaper than Production

It often happens, however, that vertical consolidation is not indicated as a means of profits. At the present time, most sections of the bituminous coal industry are seriously depressed. Productive capacity is far in excess of demand. Orders are hard to get. The cement industry uses on the average between 25,000,000 and 30,000,000 tons of high volatile coal, coal which is not elsewhere in great demand, and of which there are many producers. This coal is valued by the cement industry because they must blow powdered coal into kilns in the conversion of limestone into cement, and they require a coal with 35 to 40 per cent volatile to give them a short flame with the most intense heat at the point where the process is completed. Unfortunately for the coal producers, there is no other industry which demands this grade of coal in these quantities, and as a result, the cement mills, by "shopping around" among the producers, can buy their fuel at prices very close to the cost of production, sometimes below cost. There is no present advantage to the cement producers in going into the coal business, even though they could take the output of a large number of mines. This would mean a heavy investment and the handling of a business which the cement makers know nothing about. It is much better for them to buy the coal since there is no present prospect that the price will advance.

A similar situation confronts the sugar refining industry. Here large investments have been made, notably by the American Sugar Refining Company, in plantation properties. In 1927, these properties produced 13 per cent of the total raw sugar consumed by the American Sugar Refining Company. Owing to a revival of the European

beet sugar industry, and to developments in other sugar producing countries, including Cuba, a condition of serious overproduction, with abnormally low prices, prevails. The price fell, in 1931-1932, below one cent a pound at the very time when, in a futile attempt to limit the world supply, the Cuban Government had sharply restricted production, This combination of reduced output and low prices was damaging to the Cuban growers and American refiners. Although figures are not furnished, it is a safe conclusion that the Company's plantation investments are not as profitable as its refining operations.

The policy of the Standard Oil Company from the beginning has been to purchase crude oil and not to produce it. While the investment in storage facilities and pipe lines has been heavy, the danger of speculation in this hazardous business was minimized by the Standard Companies in keeping out of production, and taking advantage of every new development, with a resulting glut of crude oil and low prices, to accumulate ample supplies of raw material. Sometimes these large inventories of crude oil have depreciated, causing heavy losses. At other times, low-priced oil has advanced while in storage. The large oil companies, however, have, in later years, in the interest of conservation of the oil supply and to protect their investments in pipe lines and storage facilities, departed from this policy in favor of substantial investments in oil lands and producing facilities.

The meat packers and flour millers have refused to go into the production and their raw materials. Agricultural products generally sell below the average cost of production. There is no prospect of a scarcity. The purchasers of wheat, cattle, and hogs have made large profits by allowing the farmers to take the risk of bad harvests and market gluts. If, however, the mechanization of agriculture continues, with a further reduction of costs, it is not unlikely that integration in the food industry may result.

Integration in these overdeveloped raw material industries usually develops forward toward the consumer rather than backward to the producer. Thus, the meat packers have, from time to time, gone into the leather industry, usually with unfortunate results, and they have invaded the field of distributing foodstuffs until stopped by the Government. Many oil companies have started with production of crude from heavy investments in oil lands and wells, storage plants and pipe lines. A natural step forward was to the erection of refineries and the invasion of the retail markets, especially of gasoline. The development of the Sinclair Company is a case in point.

Hydroelectric Investments of the International Paper Company

An especially interesting example of forward integration —another name for vertical consolidation, toward the consumer—is the recent development of the International Paper Company. An outline of this development, both for power production and sales of paper, is contained in a statement issued by A. R. Graustein, President of the International Paper Company, on April 30, 1929. This statement, rearranged to correspond with the order of the steps in expansion and somewhat abridged to remove the discussion of news and editorial policy control, follows:

> The newsprint industry is one of the largest consumers of power that there is. In these days when the International was formed there was no such thing as long-distance electrical transmission, and for that reason, perhaps, few water powers were electrically developed at all.
>
> At any rate, each newsprint mill was located at the waterfalls and the waterfalls were used hydraulically. Some five years ago it became apparent that the price of newsprint, $75, a price at which the International was making only a very moderate profit, faced the probability of a further substantial decline, a decline which the International, as its mills were then constituted, could not stand.

It was then necessary to modernize its mills which could be modernized, and abandon other mills and otherwise prepare for the impending competition. The abandonment of each mill meant a problem as to the disposition of the water power. Many of these water powers were located at sites within transmission distance of the large industrial power markets of New England. The question which the International faced was the same which the farmer faces in getting his produce to market.

It could have sold its product wholesale to distributing companies, but in order to get the best results it felt it was best to have an interest in the instrumentality of marketing the power, feeling that in this manner it could best serve the interests of the consumer and also its own interests. It was in this manner, and for that purpose, that the International became interested in the New England Power Association, and within the year there has been put on the lines of the New England Power Association some 60,000 horsepower developed at the old Bellows Falls plant of the International, now abandoned.

The International in this way has been able, not only to realize for its stockholders on its obsolete mills, but also to serve the public and promote the industrial development of New England, a cause to which it is all the more committed now because of its large investment in the New England Power Association.

The intimate connection between newsprint and power is being illustrated from day to day in Canada. Many Canadian newsprint mills have developed their own power. The International in the Gatineau Valley, north of Ottawa, has constructed perhaps as large a hydroelectric system as has ever been built at one time, all fundamentally based on the supply of power to its big Gatineau newsprint mill, but branching out to sell power on a huge scale to the hydroelectric power commission of Ontario.

The power which the International is selling here is delivered to the commission at an extremely low price, under four mills per k.w.h., and transmitted by the commission to tie in with its Niagara system, supplementing, to a very large extent, the power, now inadequate from Niagara, and enabling the Province of Ontario to continue its industrial growth based on low cost power.

The Canadian enterprises of International have thus served the industrial development of Canada. In New England the company is hopeful of serving an increasingly useful part in the supply of low cost power for the purpose of industry.

International's Investment in Newspaper Properties

The reason for heavy investments in newspaper properties is set out in Mr. Graustein's statement as follows:

International Paper Company is double the size of any other paper company in the world. The earning power of its vast investments in the paper business has been seriously threatened, not only by a heavy decline in the price of newsprint but also by a heavy curtailment in its mills. Curtailment of production in a newsprint mill is perhaps more expensive than in almost any other industry, because the investment in plants, timber limits, working capital, etc., are so great that it takes about $5 of invested capital for $1 of turnover.

The interest, insurance, and taxes and upkeep on the $5 of course continue whether the $1 of product is sold or is not sold.

Under these circumstances, it requires very little thought to see the importance to a newsprint company of securing its share of the available business. The situation of the International Paper Company a year ago in this respect can best be described by a brief excerpt from its last annual report.

These statements indicate for 1928 a deficit of $4,706,403.97 after all dividends. In 1927, there was a balance after all dividend payments of $49,588.46.

The poor showing of 1928 is due to several factors, the foremost of which was the curtailment in newsprint production and the reduction in newsprint price. In other words, in 1928 the company suffered a heavy deficit, due, as its stockholders were informed, to the fact that it had to curtail its newsprint output very substantially. In fact, it did not have its share of the business.

It was to remedy this situation that an interest was purchased in the Boston *Herald-Traveler*. The *Herald* uses about 30,000 tons of newsprint a year, of which the International had supplied 10,000 tons in 1927 and only 5,000 tons in 1928, with the prospects for 1929 dubious. It was part of the understanding leading to the purchase of the stock that the International was to supply the entire newsprint requirements of the *Herald* from the expiration of the *Herald's* existing newsprint contracts.

Thus the International secured a very large customer at a time when it was in very serious need of business.

Some people have loosely said that an investment like this in a newspaper was unnecessary for the sale of newsprint. Such

people either know a great deal more about selling newsprint than we do or they know nothing at all about it.

As a matter of fact, the manufacture of newsprint requires, as we have said, so large an investment and the supply of newsprint absolutely every day is so vital to the paper, that some community of financial interest is natural and not infrequent. In fact, in England a majority, both of newsprint capacity and newsprint consumption, is interconnected through a community of financial interest.

Rothermere owns interests in at least three mills. The Berry group owns paper mills. Harrison, paper manufacturer, owns a chain of newspapers.

No less is such development apparent on this side. The Chicago *Tribune,* the largest consumer of newsprint in the West, has for many years owned a newsprint mill and is in process of enlarging its newsprint properties, and only within the last two or three years, the New York *Times,* probably the largest consumer of newsprint in the East, has acquired what is reputed to be approximately a one-half interest in a very large newsprint mill in Ontario.

More than that, competitors of the International have assisted in financing of newspapers, and the poor showing of International in 1928 is partly ascribable to the loss of a large account through financial assistance extended by a competitor.

Under these circumstances, it was clear to the management of the International newsprint properties that the solution admitted of only one answer—that was of obtaining additional tonnage in the only way in which it was possible to obtain it.

Owing to severe public criticism of this policy, the International Paper Company has disposed of most of these newspaper investments, keeping the newsprint contracts which was the moving consideration to making the investments.

The International Match Company has developed its European business in a similar way by purchasing bond issues of certain of the states, Germany being the scene of the latest venture, in return for monopolistic concessions to local companies which it controls. These investments can be sold from time to time as opportunity offers, leaving the value of the concessions to offset any loss on the sales.

The experience of 1930-1932 has thrown some doubt on the advantages of integration backward to the sources of raw material, although the desirability of integration forward by material producers has been confirmed by the events of this period. The experience of the cement industry in buying coal at or below the cost of production could be duplicated with almost every material. Every material has been selling at such low prices that those companies which are free to buy in the cheapest market and are not forced by integrated relationships to patronize their "captive" mines and other sources of supply have enjoyed a great advantage. Again, integration means large investment, and investment frequently means interest and always means overhead and taxes. During a depression, when the steel industry, for example, as during August, 1932, was forced by reduced demand to operate below 14 per cent of capacity, these charges on idle plant were a heavy burden. If the United States Steel Corporation in 1930 had been able to retire its preferred stock by selling its iron and coal mines and buying its materials in the open market, it is a reasonable conclusion that the position of the common stockholders would be more favorable than it now is. During periods of scarcity and rising prices, integration is profitable. It may be that such a situation may again arise. Present indications, however, with a rapid increase in technical efficiency in every line and with the opening of new sources of supply of every material, *e.g.*, the South-African copper discoveries from which copper can be laid down in London at a profit at 5 cents a pound, do not point to an early return of those conditions which made integration toward the raw material popular and profitable. It is likely that the experiences of vertically consolidated companies in the present depression will be an object lesson which will tend to check consolidation toward raw material supplies except with a known limitation of supply and a practical monopoly.

Justice Brandeis' Criticism of Consolidation

A consideration which must be held in mind in considering the future of consolidation, was forcibly stated by Mr., now Justice, Louis D. Brandeis in his testimony in 1911 before the Senate Committee on Interstate Commerce as follows:

> Any one who critically analyzes a business learns this: That success or failure of an enterprise depends usually upon one man; upon the quality of one man's judgment, and, above all things, his capacity to see what is needed and his capacity to direct others.
>
> Now, while organization has made it possible for the individual man to accomplish infinitely more than he could before, aided as he is by new methods of communication, by the stenographer, the telephone, and system, still there is a limit to what one man can do well, for judgment must be exercised, and in order that judgment may be exercised wisely it must be exercised on facts and on a comprehension of the significance of the relevant facts. In other words, judgment can be sound only if the facts on which it is based are known and carefully weighed. When, therefore, you increase your business to a very great extent, you will find, in the first place, that the man at the head has a diminishing knowledge of the facts, and, in the second place, a diminishing opportunity for exercising a careful judgment upon them. Furthermore—and this is one of the most important grounds of the inefficiency of large institutions—there develops a centrifugal force greater than the centripetal force. Demoralization sets in; a condition of lessened efficiency presents itself. These manifestations are found in most huge businesses—in the huge railroad systems, as well as in the huge industrial concerns. These are disadvantages that attend bigness.

Methods of Dealing with This Disadvantage of Consolidation

Mr. Brandeis' criticism related primarily to size. His view was that a large company cannot be managed as efficiently as a small concern where the "eye of the master" is on every operation. There are methods of overcoming this disadvantage which attaches to the large business.

Some of these methods have been taken up in the discussion of the decentralization of management of large holding companies in the public utility field. The continued growth of the combination movement and the extraordinary prosperity of these large companies indicates either that the disadvantages of "Big Business" which Mr. Brandeis emphasizes have been overcome by decentralized management, or that, if these disadvantages still exist, they are more than offset by the financial and business advantages of large organizations.

Foregoing Objections More Applicable to Vertical Consolidations

Mr. Brandeis' objection applies more directly to vertical combination. In a horizontal combination, there is a multiplication of identical units. One gas works, or grocery store, is much like another. The best methods of operation can be standardized and applied to every unit. Close comparisons can be made and operating efficiency can be checked. I see no reason to doubt, if the law permitted, that the entire population of the United States could be supplied by one food chain, or that all the moving picture houses could be gathered into one organization.

When we consider vertical consolidation, however, the difficulties are greater. One organization can manage one business, but can it manage different kinds of business? Will the time ever come when cinema film can be produced as economically by a subsidiary of a motion picture consolidation as by the Eastman Kodak Company? Can a grocery chain produce bread and cake as cheaply and of as good quality as Ward or Freihofer? Each business has its own problems, its own peculiar characteristics. If sound judgment is to be exercised upon these problems, the business must be thoroughly understood by those whose judgment controls. The Pennsylvania Railroad has never been able to build locomotives as cheaply in its Altoona shops

as it can buy them from the manufacturers. In fact, although the railroads are the largest consumers of a great variety of materials and equipment, they produce very little of them. With the constantly swelling volume of production, specialization increases, costs decrease, and the advantages of production over purchase are reduced. At the same time, the difficulties of central administration of large and complex supply industries increase. It is impossible to dogmatize on the point. No statement of general application to every situation can be safely made. We may, however, conclude by expressing a serious doubt that vertical consolidation which, carried to its logical conclusion, means a limited number of large concerns, reaching from the raw material to the finished product, will ever reach a stage of development which will exclude the independent concern from the responsibilities and rewards of uncontrolled activity.

CHAPTER XXXVIII

THE ECONOMIES OF INDUSTRIAL COMBINATION

Mr. Charles R. Flint, who was active in the promotion of many industrial consolidations, in his *Memories of an Active Life,* published in 1923,[1] summarizes the advantages of industrial combinations as follows:

The most important benefit to be derived from it is the attainment of high-speed-automatic-machine-low-cost-standardized quantity production, which makes possible the manufacture and maintenance of products of superior quality.

Because of the magnitude of their affairs, industrial consolidations are able to offer, in salaries and a percentage of net profits generally over and above a previous maximum, a sufficient inducement to secure men of the first order of ability—men who are not tempted by a fixed salary, but by the incentive of making a record and profiting by it.

The consolidated corporation, under a system of comparative accounting and comparative administration, subdivides its business so that each of its various departments is headed by a man who, through long experience and concentration, operates at the highest efficiency. Furthermore, industrial consolidations are able not only to secure the best men as executives, administrators and employees, but also to retain men of the highest standing in the consultative professions—lawyers, engineers, architects, chemists, and other advisers and technicians. Thus better service is assured, with an overhead cost less than the aggregate amount which was paid to men of lesser capacity by the various constituent companies.

The consolidation not only adopts the best methods to be found in any of its various plants, but it improves them through continual experimentation by the ablest experts.

It reduces stocks of merchandise, thereby saving interest and carrying charges, and minimizing loss from depreciation.

[1] Quoted in Dewing's *Financial Policy of Corporations.*

It centralizes sales and advertising, and eliminates duplicate trade catalogues.

It greatly reduces the volume of fixed and circulating capital per unit of output.

It retains lawyers and experts of experience and demonstrated ability for patent and trade-mark protection. By consolidation, inventive genius is less hampered by conflicting patents, and expensive litigation is largely eliminated.

It utilizes the advantages of a central traffic control, eliminating duplicate routes in the transportation of products sold and received, and locates factories with relation to labor, raw material, and markets.

Consolidation facilitates financing; the shareholders have greater security than they generally have in ownership of individual companies; their shares are available for loans, or convertible into cash, and are readily divisible for the disposal of part interests or for subdivision by will.

Professor Dewing's Criticism of Combinations

Professor Arthur S. Dewing, writing in the *Quarterly Journal of Economics* in November, 1921, proves that a list of thirty-seven industrial combinations, organized before 1914, showed results which were disappointing; in fact, their earnings were less than half, during the ten years following consolidation, of the promoters' estimates. Dewing sums up the result of his study as follows: ". . . after sufficient time had elapsed to permit the consolidation to perfect its organization, to reconstruct its plants, and to effect all the anticipated economies of combination and large scale production, and after considerable sums of new money had been invested in betterments and new plants, the earnings gradually diminished until they were no more, perhaps a little less, than during the first year of consolidation."

In his *Financial Policy of Corporations,* in which the above quoted article is reproduced, Professor Dewing gives six reasons to explain the alleged failure of industrial combinations to realize their anticipated economies: (1) diffusion of responsibility, (2) lack of knowledge of indi-

vidual employees, (3) lack of loyalty of officers and directors, (4) lack of attention to the *laborious parts of the business by the higher officials,* (5) prejudice of customers against improved methods (of salesmanship), (6) prejudice of customers against trusts.

Professor Dewing's conclusions as to the efficiency of industrial combinations are indeed gloomy. So far as these conclusions explain the unwise financial policy of the combination of 1898–1902 in assuming too heavy a burden of fixed and preferred dividend charges, on the basis of exaggerated estimates of earnings, they are valuable. This author's look backward may be compared with various critical reviews of the financial prospects of the industrial combinations which appeared about twenty years before his study, and which clearly forecast the immediate result of overoptimistic promotion.

Examination of the Results of Thirty-seven Consolidations

Before we accept Professor Dewing's conclusions as of general application, and it is perhaps unfair, in spite of the broad form of statement which he employs, to infer that he so meant them, let us examine the present condition of these industrial combinations, most of them at least thirty years old. In the following table is presented in brief form this information: (1) date of incorporation, (2) solvency of the companies from the date of their organization, (3) the aggregate percentage dividends paid on their common stocks, during the five years 1924–1928, and (4) the amount of their earned surpluses at the end of their last fiscal years. In connection with (3) and (4), it should be remembered that the common stocks of these industrial combinations represented the capitalization of the so-called economies of combination, including, as a principal element of value, the control of the market. Preferred stocks and bonds represented a most liberal estimate of the value of their separate plants before inclusion in the combination.

CONDITION OF INDUSTRIAL COMBINATIONS

NAME OF COMPANY	DATE OF INCORPORATION	SOLVENT SINCE ORGANIZATION	TOTAL DIVIDENDS PAID ON COMMON STOCK, 1924–1931, PER CENT	ACCUMULATED SURPLUS, 1931
Allis Chalmers Manufacturing Company	1901	no	52½	$16,840,314
American Agricultural Chemical Company	1899	yes	none	8,442,748
American Beet Sugar	1899	yes	8	(deficit)
American Brake Shoe & Foundry Company	1902	yes	38	10,651,947
American Can Company	1901	yes	101	70,012,730
American Car and Foundry Company	1899	yes	68½	39,445,021
American Chicle	1899	yes	24¼	4,018,437
American Hide & Leather	1899	yes	none	1,791,489
American Ice	1899	yes	75¼	8,347,888
American Locomotive	1901	yes	68½	20,661,196
American Radiator	1899	yes	55	57,977,200
American Smelting & Refining Company	1899	yes	67¼	23,319,167
American Steel Foundries	1902	yes	56	10,765,836
American Woolen	1899	yes	5¼	17,738,679 (deficit)
American Writing Paper	1899	no	none	47,918 (deficit)
Anaconda	1895	yes	52¾	69,613,562
Bethlehem Steel (U. S. Shipbuilding)	1902	no	17¾	114,844,280
Borden Company	1899	yes	86	30,021,917
Certainteed (General Roofing)	1904	yes	14	2,218,609
Corn Products Refining Company	1906	yes	96½	24,585,669
General Asphalt (National Asphalt)	1903	yes	7¼	7,881,853
International Harvester	1902	yes	51½	54,695,735
International Mercantile Marine	1902	yes	7¼	185,470
International Paper	1898	yes	33 1/10	11,961,887
International Silver	1898	yes	32	2,407,213
National Biscuit	1898	yes	196	35,320,542
National Enameling & Stamping	1899	yes	2½	2,917,077 (deficit)
Niles Bement Pond Company	1899	yes	9	2,937,898
Otis Elevator	1898	yes	114	13,900,873
Pittsburgh Coal	1899	yes	none	1,508,818 (deficit)
Republic Steel	1899	yes	12½	11,873,774
United Shoe Machinery	1899	yes	107	15,995,097
U. S Envelope	1898	yes	84	3,463,262
U. S. Leather	1893	no	none	1,816,887
U. S. Steel	1901	yes	95¼	421,837,192
Virginia-Carolina Chemical	1895	no	none	none
Worthington Pump & Machinery	1899	no	none	3,848,931

Many of these plants were badly located, and the management of many of the constituent companies was inferior. A large amount of obsolete machinery was taken over.

Finally, a fact not generally noted, many of the constituent companies before selling their property, by special dividends, removed their working capital, selling only the plant, organization, and goodwill, thereby further depleting the value of the assets obtained by the consolidated company in exchange for its senior securities, and increasing the burden laid upon the new company in paying dividends upon its junior securities.

Here are thirty-seven industrial combinations—most of them horizontal combinations of manufacturers operating in the same line—all formed with the primary object of limiting competition and realizing the economies of combination. The limitation of competition may be dismissed from consideration. We shall see in a later chapter how the Federal courts, by 1906, had stopped the movement toward monopoly. Indeed, after 1902, faced by the determined hostility of the Roosevelt administration, the consolidation movement, so far as it aimed at dominating control of industries, came to an end. These companies are all large factors in their respective lines. They exert the influence upon prices and production which their relative importance permits. But monopolistic combinations they are not. In this regard, the predictions of their promoters have been disappointed.

An examination of the results of these thirty-seven industrial consolidations shows that six of them have, at some stage of their checkered careers, become insolvent. In their present form these represent reorganizations of predecessor companies: Allis Chalmers, American Writing Paper, United States Shipbuilding (taken into the Bethlehem Steel Company), United States Leather, Virginia-Carolina Chemical, and International Steam Pump & Machinery, now Worthington Steam Pump. Of these six, two have had a fair measure of success, after reorganization. The three last mentioned have never been successful, due to causes inherent in the business and not to be charged to

the account of size. Of the thirty-seven companies listed, the following fourteen have been conspicuously successful both in paying dividends on their watered, originally valueless common stock, and in accumulating large surpluses, while making ample provision for depreciation of plant and depletion of mineral properties when this was necessary: American Brake Shoe & Foundry, American Can, American Ice, American Locomotive, American Radiator, American Smelting & Refining, Anaconda Copper, Borden Company, Corn Products Refining, International Harvester, Otis Elevator, United Shoe Machinery, United States Envelope, and United States Steel. The last mentioned company, because of its large size and the multitude of companies and properties which it has been obliged to digest, is of peculiar significance in this inquiry.

Special Causes Explain the Poor Results of Many Consolidations

Eleven companies out of thirty-seven, while remaining solvent, are still to justify the representations of the promoters as to their common stock. And yet their ill success is not to be considered as a reproach either to their form of organization, or their size. The American Agricultural Chemical Company has suffered severely from the continued depression in agriculture since 1920. The American Hide & Leather and the United States Leather have had their markets invaded by leather substitutes. The machine tool companies, such as Niles Bement Pond, have struggled in a highly competitive market, while the productive capacity of the industry was largely increased by the War. The Pittsburgh Coal Company is the victim of continued labor troubles which almost ruined it, and is operating in an industry enormously overdeveloped in production, with a declining demand for soft coal. Republic Iron & Steel started as a producer of iron. Bar and forge iron has been largely superseded by steel, and the property of the company has been

reorganized to meet the new requirements. American Woolen is the victim of a world-wide textile depression, primarily due to a change in fashion and to the competition of silk. International Paper, until its new departure into water power, was exposed to severe and persistent competition from concerns as well equipped as itself.

There is little reason to be found in the ill success of these companies to condemn the plan of industrial consolidation as such. Let it be repeated that these companies, with few exceptions, started as potential monopolies. Their capitalization was based upon the anticipated profits of market control. The hopes of monopoly were not realized, and these far-flung consolidations have been forced to rely upon the economies of centralized management, and the advantages of big business. It is indeed remarkable, and a striking refutation of their critics, that they have won such a large measure of success.

We have additional evidence of the value of industrial consolidation as a means of increasing profits. Consider the Standard Oil companies and the tobacco companies, all consolidations and all successful—far more successful after the original monopolistic consolidations were dissolved than before—the Westinghouse and General Electric companies, the National Lead Company, the DuPont Company, and, as the most conspicuous illustration, the most profitable company in the world, the General Motors Corporation, a consolidation of previously independent units.

Decentralization as a Means of Securing Efficient Management

To return again to Professor Dewing's criticisms of industrial combinations, it is easy to understand that these objections are not irremovable, nor do some of them apply either to the old consolidations, nor to those which have been recently formed. Diffusion of responsibility, his first criticism, is recognized as a serious evil. It has been reme-

died by the same decentralization which we noted in the organization of the Utility Holding Company. General Motors has carried decentralization to an extreme. Officials of each division or subsidiary company are given very large responsibility for the conduct of their own department. The central organization acts as a general staff, controlling finance, advertising, and such general functions. The detailed conduct of operations is left to each division. Even the sales managers, each in charge of the sale of certain cars in certain territories, are not interfered with by the central office. They are occasionally called together for conferences, at which new sales policies initiated in some territory or suggested by a general official are canvassed, but even here there is no enforcement of these policies until a general agreement has been reached. Another illustration of decentralization is the segregation of its several departments by the United States Rubber Company.

Big business sacrifices, to some extent, personal relations with customers. Corporation officials, as a rule, do not take the same interest in their departments that an owner takes in his own business. An official, however, is held responsible for results. If results are not forthcoming he must step out. At the same time, the rewards of successful effort are so great, and the advantages of supervision, based on comparison of the results obtained by comparable plants, are so evident, that the balance of advantage is in favor of the large company. I have seen, at close range, some of the operations of one of the larger combinations, which operates a number of plants. Each day the superintendent of each plant forwards a detailed report to the New York office, covering every detail of costs, production, and quality. If he falls below the standard set by experience, he is immediately asked for an explanation. If one plant shows better results than another, the attention of those making the comparatively poor showing is immedi-

ately directed to the delinquencies. Efficient management, on the other hand, is rewarded. This comparative method of control is in general use and operates continually to raise standards and increase efficiency.

Profit-Sharing through Stock Ownership to Secure Managerial Interest

I have already called attention to the management company of the General Motors. This is only a part of a large plan. The 1928 report of this corporation stated the objects of its personnel policy as follows:

Previous annual reports have dealt with the various plans which have been developed by the Corporation for the purpose of promoting the well-being of its operating organization. Stockholders must necessarily appreciate that, irrespective of the number of millions of dollars that the Corporation may have invested in real estate, buildings, machinery, inventories, or cash, and while recognizing the essential part that such investments play, yet after all the ability to capitalize that investment in the form of a satisfactory profit from year to year, depends upon the loyalty, efficiency and effectiveness of the operating organization. It is believed that General Motors Corporation is taking an advanced stand in establishing the principle that each member of the organization is entitled in addition to the daily wage, to an opportunity to participate financially, in some form or other depending upon his relative position, in the progress of the Corporation. In this way a partnership relationship to the business is developed, the effect of which upon the efficiency of the organization is an important consideration.

Due to the rapid growth of the Corporation's business and the resultant enlargement of its earnings, the plans adopted in applying this principle of participation have already substantially furthered (as in the future they should continue to further) the attainment by the members of the organization of financial independence in greater or less degree. This should and will, if properly dealt with, have the effect of making possible a higher standard of achievement, not only through the stimulating effect of financial incentive, but also by facilitating the maintenance of an efficient personnel. Individuals who have been loyal and effective members of the organization for many years, but whose

effectiveness is declining for any cause whatsoever, must be replaced if efficiency is to be maintained. Means should be provided whereby this can be effected without injustice and without resulting hardship to themselves or their dependents. They are entitled to that consideration. Financial independence, even in limited degree, enables the situation to be dealt with, having solely in mind the prime necessity of efficiency. Younger men can then take up the burden—men having their position in life to create; men with new ideas, new enthusiasm and ambition to do bigger things. This policy cannot help having a stimulating influence, besides making possible the maintenance of a high standard of efficiency.

The Employees' Saving and Investment Plan of the General Motors Corporation

In striving for this ideal, the General Motors Corporation has developed an Employees' Saving and Investment plan, to which the participating employee contributes two-thirds and the company one-third. "At the close of 1928, 158,753 employees, 89 per cent of those eligible, were participants in this plan," and the maturity of the class starting in 1923, resulted in a payment of $14,189,688 to 12,033 employees, most of which represented an increase in value of the stock in which the contribution of the company, five years ago, had been invested. General Motors Corporation also maintains a Group Insurance Plan in which 180,383 employees, or 98.3 per cent of those eligible participate.

The company also assists employees in investing their savings in its preferred stock. In 1928, 12,803 shares were purchased by 2,817 employees. Assistance is also given employees in the purchase of homes, and a substantial beginning has been made in training employees for executive positions.

Such plans for improving the conditions of workers are not peculiar to the General Motors. In one form or another, and in various stages of development, they are in operation by large companies in many lines of business. They are the answer of Big Business to the criticism that it

is impersonal, that it cares nothing for the welfare of those who make its success possible.

Conclusion

The available evidence points to the conclusion that consolidations have established their right to exist, and have justified in large measure the hopes of their originators. The objections to them, based on the ground of inefficiency and impersonality, have been recognized and to a large extent answered by the results achieved. In every line, the consolidation movement is advancing. The rapid progress of the development, if no other evidence was available, would indicate that the advantages are great, and that the disadvantages can be overcome.

CHAPTER XXXIX

THE FINANCIAL MOTIVES OF CONSOLIDATION

Underlying all combinations are two basic considerations: (1) The consolidation must either increase gross receipts or reduce operating expenses or, at any rate, there must be a *prima facie* case made out for such increased profits; (2) those concerned in the consolidation must (*a*) make money out of the consolidation, or (*b*) save themselves from loss, or, (*c*) a fortunate conjunction of circumstances, do both. These consolidations are engineered by bankers and promoters, the last mentioned group usually made up of large stockholders who may or may not be officers of the corporations to be merged. We have considered in the preceding chapters the economic reasons for consolidation. To complete the picture, it is necessary to understand the extent to which purely financial matters, the averting of a loss or the making of a stock market profit, enter into these mergers.

Motives of the Steel Corporation's Promoters

This can be best understood by a detailed study of the events leading up to the organization of the "Trust of Trusts," the United States Steel Corporation. Official apologists for the corporation—using the term apology in its theological sense, as explanation rather than excuse—have explained the formation of the corporation as the result of a far-sighted plan to place the steel industry of the United States in a position of eminence, to specialize production so that one mill would run on one product, to join together under one ownership all the stages in the pro-

duction of finished steel, ore, coal, transportation, manufacture, to cultivate the export trade, and to stabilize and harmonize the relations between capital and labor. No doubt all these most desirable objects were in the minds of the promoters of the United States Steel Corporation, and in its development these objects have largely been achieved, but we do not find, in a desire to reach these worthy and desirable ends, the real reason for the organization of the steel trust.

Capitalization of the Economies of Combination

The United States Steel Corporation brought together in a "Trust of Trusts" a group of consolidations in the steel industry, which, in turn, had united each in its special field, a large number of competing plants.

The method invariably followed by these consolidations was to obtain options on the plants in a particular line, such as wire, or sheets, or tubes, which it was desired to consolidate, at very liberal prices, payable, for the most part, in stock of the company which was to own these properties, preferred stock for the value of the plant before consolidated, and common stock to represent the increased value due to the consolidation. These consolidations, with the exception of the Federal Steel Company and the National Steel Company, aimed at monopoly each in its own field. Tubes, structural steel, wire, sheets, and tin plate included nearly all the active producers. Federal and National Steel were regional consolidations, the first centering about Chicago, the National Steel in Eastern Ohio, each including former competitors. It was argued, and generally believed, that the limitation of competition by consolidation would increase profits, and that increased profits, resulting from control of supply and so control of prices, would be sufficient to pay dividends on the common stocks of the new companies. Preferred stock, 7 per cent cumulative preferred as a rule, would pay dividends,

based on the earnings of the plants in separation, each of them at war with its rivals. With commercial warfare abolished, or, at any rate, restricted by combination into large companies, some of them close to monopolies, profits would be larger, values would be increased, and common stock issues would pay dividends out of these increased profits. Some of this common stock was given as additional consideration for the purchase of properties. Some of it went to promoters. The underwriting bankers received substantial amounts. Preferred stock was also sold to provide working capital, since, as a rule, the current assets after the deduction of current liabilities were distributed to the owners of the plants. This, then, was the situation of the six combinations in the iron and steel industry at the end of 1900. They were overcapitalized on the basis of former earnings. These were generally regarded as industrial experiments. Their capitalization was based upon the predictions of their promoters that the experiments would be successful. These predictions much time was needed to justify. Meanwhile, the steel trusts were exposed to great and evident dangers. Competition from new enterprises was threatened. The future relations between the trusts themselves were by no means certain to be harmonious. In short, the position of the steel trusts was essentially speculative—a fact proved by the sale of their stocks at low values. If the values of these securities were to be raised to an investment level, and kept at that height, these doubts and apprehensions must be removed from the mind of the investor. This could be done in no other way than by the passing of dividends and the building up of large reserves.

Necessity of Conservatism in Income Management

Iron and steel, from the standpoint of the surplus and reserves which are necessary to sustain the dividend rate of corporations engaged in their production, belong to the

class of commodities whose demand is fitful and uncertain. The surplus accumulations of a steel company, if its securities are to sell at investment prices, should, therefore, be larger in proportion to its earning power than the reserve of a railway corporation. Only by the accumulation of a large amount of surplus earnings can a corporation engaged in the manufacture of steel guarantee to the investor that if he buys its securities his sleep shall be sweet.

The plain duty of the management of the steel trusts was to defer dividends and squeeze out the water in the capitalization of their companies by the accumulation of large surplus reserves. More especially was such a conservative policy required when the extraordinary profits of the steel trade during 1899–1900 are considered. The *Iron Age* made, at the time, the following comment: "Recent events have caused much discussion in financial circles of the wisdom or unwisdom of declaring dividends on the stocks of the newly created iron and steel consolidations. . . . It will be better for them and for their stockholders who are investors to accumulate a handsome surplus, so that the dull times which are sure to come in the future may not catch them financially unprepared. The bigger the corporation the greater is the amount of hard cash needed when a pinch comes." The interests in control of the steel trusts, however, rejected a conservative policy. All the companies paid the regular dividends on their preferred stocks from the date of their organization to January, 1901. The Federal Steel, American Steel & Wire, and National Tube companies, in addition to dividends on their preferred stocks, paid a good return on the common. The combined dividends of the Federal Steel, American Steel & Wire, National Tube, American Bridge, National Steel, American Tin Plate, American Steel Hoop, and American Sheet Steel companies, from their several dates of organization to January 1, 1901, exceeded $30,000,000, all of which should, under the circumstances, have been retained in the business.

Steel Trusts in a Weakened Position in 1900 because of Dividend Policy

The pursuit of this policy of dividend payment found the steel trusts at the close of 1900 in a position which invited attack. All the "water" of combination still remained in their systems. But little of the shadow of "anticipated profits" had been replaced by the substance of actual earning power. The combined capitals of six of the steel combinations, American Bridge excluded, showed $408,070,200 of stock, $39,073,271 of bonds, and a surplus of accumulated profits of only $32,687,250 or 7.3 per cent. When we consider that $215,484,000, or 53 per cent, out of a total stock capitalization of the steel trusts of $408,070,200 was common stock, whose value was yet to be demonstrated by earnings, the security offered to an investor in the steel stocks by a surplus of $32,687,250 can be estimated at its true value as considerably less than nothing. These balance sheets, in reality, showed deficits much larger than their apparent surpluses. Such was the result of a policy of liberal dividend payments. After two years of high prices and large profits, the financial position of the steel trusts was but little better than at the outset of their careers.

Stock selling campaigns, to be successful, must be backed by the convincing argument of dividends. Common stock dividends might and, in fact, were, in many cases deferred. But preferred dividends, in view of the glowing representations which had been made as to the large profits which were certain to be realized, must be regularly paid. Marketing considerations controlled. "After us the deluge." "Let the future take care of itself."

Here, again, temporary financial considerations controlled. The trusts had been organized to make a quick profit. Owners of constituent companies wished to realize on at least a part of their investment which the consolida-

tion had made liquid. Underwriting bankers had advanced large sums of cash to buy out interests who demanded cash and would not take stock. This cash had been borrowed largely on the collateral security of the consolidation stocks. These loans must be paid. The trust stocks were speculative. They must be sold on the open market or to speculative investors attracted by the opportunity to make large profits.

As a result of this policy, the steel consolidations were unprepared for competition. With small reserves and with speculative values established for their shares, any reduction of the earnings of the steel trusts was to be feared by their stockholders as a calamity. Such a competition, invited by the policy of the consolidations, confronted them at the beginning of 1901.

Steel Companies Divided into Two Independent Groups

The manufacturing companies which were merged into the United States Steel Corporation were divided, on the basis of their products, into two classes. The Carnegie Steel Company, the Federal Steel Company, and the National Steel Company were large producers of steel billets, ingots, bars, plates, and slabs—products not yet in their final form, and constituting the materials for other branches of the iron and steel industry. The second group, including the National Tube, American Steel & Wire, American Tin Plate, American Steel Hoop, and American Sheet Steel companies were, as their titles indicate, producers of finished steel goods. They obtained most of their materials from the primary producers of steel and converted them into wire, pipes, tin plates, sheets, cotton ties, and structural material.

These two groups of companies had large dealings together. The Federal Steel Company furnished the western plants of the American Steel & Wire Company with most of their wire rods, and furnished steel billets to the Ohio

plants of the National Tube and American Bridge companies. The Carnegie Steel Company found its principal market among the finishing mills of the Pittsburgh district, including representatives of all the members of the second group of producers. The National Steel Company supplied a portion of the demands of the Tin Plate, Sheet Steel, and Steel Hoop companies, whose financial control was identical with its own.

Between these companies, until the fall of 1900, there was little reason for competition. The mills of the Carnegie Company in Pittsburgh were five hundred miles distant from the principal plants of the Federal Steel Company in Chicago. The National Steel Company, although its mills were, properly speaking, within the Pittsburgh district, was not yet strong enough to come into serious conflict with the Carnegie Steel Company. As for the finishing companies, their products were so entirely distinct as to afford no ground for competition. So long as the active demand for steel, which had begun in the winter of 1898–99, should continue, there seemed to be little danger of conflict. Every company was fully occupied, and had no need to go outside its own province to keep its mills running.

The harmony of interests among the various companies, however, was unstable, because it depended upon a restriction of each producer within its own field. If, for any reason, the primary producers should enter the lines of finished material, or if the finishing companies should either attempt independence by producing their own pig iron and steel, or should invade the territory of their fellows, serious competition would result. The productive capacity of the different companies was so large that successful invasion by any one of them of a field hitherto controlled by others would mean serious injury to the original occupants. The *modus vivendi* of the iron and steel trade was, therefore, a condition of unstable equilibrium.

With the reaction in the steel market, which began in the spring of 1900 and continued until November of that year, it was evident that the trade must adjust itself to smaller profits; and the conflicting forces, which had been held in abeyance during the season of prosperity, became threateningly evident. The stock capitalization of the recently formed consolidations was based upon the large profits of 1899. If dividends were to be continued during periods of reduced demand, every effort must be made to strengthen the position of the companies by reducing expenses. In no other way could this improvement be so readily made as by securing the largest possible measure of independence in the field of raw materials.

Integration Policy of the Carnegie Steel Company

In 1882, the Carnegie Steel Company (then Carnegie, Phipps & Company) had inaugurated a policy whose object was to control all the factors contributing to the production of steel, from the ore and coal in the ground to the steel billet and the steel rail. The purchase of a controlling interest in the stock of the H. C. Frick Coke Company, the largest owner of coal lands and the largest producer of coke in the Connellsville region, insured to Carnegie, Phipps & Company, besides a majority share in the earnings from the sale of coke in the open market, a supply of coke at prices so close to the cost of production as in later years to be a matter of legal complaint from the minority stockholders. In 1899, the Frick Coke Company owned fully two-thirds of the coal remaining in the Connellsville region. The Carnegie Company also leased 98,000 acres of natural-gas land in western Pennsylvania, and purchased valuable limestone quarries in the Pittsburgh district, securing by these several purchases an independent supply of fuel and fluxing material, and adding to the earnings of their steel mills the profits on the production of these materials.

The Carnegie Company was also active in obtaining control of its ore supply and its transportation facilities. By the purchase, in 1896, of a five-sixths interest in the stock of the Oliver Iron Mining Company and by a fifty-year contract, made in 1897, with the Rockefeller iron mining and transportation companies, by which the Carnegie Company agreed to pay a royalty of $1.05 per ton for a yearly supply of 1,500,000 tons of soft ore delivered on shipboard, and a further maximum payment of 80 cents per ton for the transportation of this ore to the lower lake ports, the Carnegie Company secured an abundant supply of ore at prices which were not only more stable than those of the open market, but which were lower than the prices paid by outside companies. The Carnegie Company also purchased a controlling interest in the Pittsburgh Steamship Company, which owned, in 1900, a fleet of 11 steamships and 2 tugboats and had 6 additional steamers under construction.

It also secured control of the Pittsburgh, Bessemer & Lake Erie Railroad, extending from Conneaut, Ohio, where large docks were built and ore-handling machinery installed, to the Carnegie mills at Duquesne. This railroad was reballasted with cinder from the blast-furnaces and relaid with 100 pound rails. The equipment was replaced by the first steel cars used in the United States, and by the heaviest engines. Through these improvements, the cost of transportation was reduced to 1 mill per ton mile, the lowest cost, with one exception, of any railroad in the world. The ownership of an ore fleet made the Carnegie Company independent of the wide fluctuations in lake rates, and their control of the railroad gave them transportation at cost; for the Pittsburgh, Bessemer & Lake Erie Railroad, until 1900, had paid no dividends.

By the close of 1897, the Carnegie Company was almost completely self-sufficient in all the factors of production. The profits which competitors added to their costs were

added to its earnings; and the possession of these advantages, along with the admirable equipment of its furnaces and mills, gave to the Carnegie Company the foremost position in the world.

Integration Adopted as a Policy by Carnegie Competitors

The lessons of this example were not lost upon the leaders in the iron and steel consolidations of 1898 and 1899. No sooner were the new companies fairly upon their feet, and no sooner did they realize the necessity of greater economy, than they began a movement toward the attainment of an independence in raw materials similar to that which the Carnegie Company had already achieved. This independence, it should be observed, had been, in every case but one—the National Tube Company—provided for in the original plans for the companies; and the certain realization of this independence had been urged by the promoters as a most important advantage.

The Federal Steel Company included in its list of properties the Minnesota Iron Company, which controlled 150,300 acres of ore-land in Minnesota and Michigan, and which was the largest producer of hard ore on the five ranges. The Federal Steel Company further controlled the Duluth & Iron Range Railroad, which hauled the product of the Minnesota Iron Company, and the Chicago, Lake Shore & Eastern, and Elgin, Joliet & Eastern Railway companies, owning 346 miles of road in Illinois, and furnishing an independent connection between the various plants of the Federal Steel Company in the Chicago district. The Federal Steel Company further included among its holdings the property of the Minnesota Steamship Company, consisting of twelve steel steamers and ten barges, besides valuable dock property on the upper and the lower lakes. This company subsequently acquired a small area of coal-land—1,650 acres—in the Connellsville district, with 11,304 acres of inferior coal in adjoining districts and in West

Virginia. The ore supply and the transportation facilities of the Federal Steel Company were not greatly inferior to those of the Carnegie Company, although its supply of Connellsville coking coal was not adequate to its future needs.

The American Steel & Wire Company—a large customer of the Federal Steel Company in the West, and of the Carnegie Steel Company in the Pittsburgh district—followed the example of the other organizations. It acquired 2,000 acres of Connellsville coal and ore properties with an annual output of 916,000 tons. Some of the directors of the American Steel & Wire Company also owned the American Steamship Company, with a fleet of twelve ore steamers, which were afterward transferred to the Steel & Wire Company. On the basis of these advantages, the American Steel & Wire Company proposed to build a large steel plant at Milwaukee which would supply raw material to its western mills, and in the Pittsburgh district began the installation, on Neville's Island, situated in the Monongahela River below Pittsburgh, of a complete system of production from ore and coke to wire, wire nails, and springs.

The National Steel Company had also purchased iron mines with an annual output of 1,300,000 tons and considerable tracts of coal land in the Connellsville and adjoining districts, and it began the installation of a furnace capacity sufficient to supply the total requirements of the Tin Plate, Sheet Steel, and Steel Hoop companies, whose financial control, represented by William and J. H. Moore, was identical with its own.

The National Tube Company adopted the same policy. This company owned no ore or coal, but evidently relied upon its friendly relations with the Federal Steel Company—J. P. Morgan & Company being represented in both—to secure for it ore and coal on favorable terms; for in the fall of 1900 the National Tube Company began the

construction of a large open-hearth steel plant at Wheeling, West Virginia, which was designed to furnish steel billets to all its plants in the Central West.

Integration Threatens Carnegie Steel Company's Markets

During 1900, these projects of industrial independence were rapidly taking form, and their approaching consummation menaced the continuance of harmony in the steel trade. In the West, the Federal Steel Company was faced with the danger of losing its market for wire rods, and in the Ohio district, with the loss of a large demand for the output of its Lorain plant. In the Pittsburgh district, the Carnegie Company was affected by each one of the developments in that section. The American Steel & Wire, the Moore companies, Sheet Steel, Steel Hoop, and Tin Plate, and the National Tube Company were all striving to make themselves independent of the Carnegie Company, which had, from the beginning, found its largest market in the mills its would-be rivals now controlled. If their plans should materialize, the Carnegie Company would have to find new markets for its blooms and billets—markets much more difficult to approach than those which the Pittsburgh district afforded. Its former customers would produce for themselves the material which they had purchased. The tendency of the iron and steel industry, under the leadership of the consolidations, was toward a declaration of industrial independence, which would leave the Carnegie and the Federal Steel companies to build new avenues of demand.

Countermoves by Carnegie and Federal Steel

Neither of these companies, however, had any intention of submitting to such a loss of markets. They had long since determined—in the case of the Carnegie Company, according to Mr. Schwab, in the early part of 1900—to resist their former customers by direct competition. If the

other large companies refused to buy their steel billets, they would convert those steel billets into wire rods, sheets, and tubes, and sell them in competition with their recalcitrant customers—in other words, they would seek their new markets, not in foreign lands or in new forms of production, but in the preserves of their rivals.

The Federal Steel Company led off in this countermovement by threatening to build wire mills unless the American Steel & Wire Company should abandon its plan of producing its own material, and renew its wire-rod contract with the Federal Steel Company. The Steel & Wire Company saw no present profit in competition, and its western extensions were abandoned.

The Carnegie Company's Answer to the Threat of Loss of Its Markets

With the situation in the Pittsburgh district, the Carnegie Company proposed to deal in similar fashion. On January 12, 1901, this company announced the proposed construction of a large tube mill at Conneaut, Ohio, having chosen this location on Lake Erie, both because of the railway discrimination against Pittsburgh in east-bound freights, and because the empty ore cars returning from Pittsburgh could be filled with coke for the tube works. They also proposed to build sheet mills at Homestead; and it was intimated that other lines of finished material would be invaded. The *Iron Age* of January 17, 1901, describes the situation as follows:

> Avowedly the Carnegie Steel Company have decided that in view of recent developments their policy must be to carry the processes of manufacture forward from the ore and coal in the ground to the finished marketable product. In other words, ultimately no steel will be marketed in the form of the billet. The Carnegie Steel Company now produce steel rails, structural material, and plates. Quite recently the manufacture of axles has been added. . . . In a few months the plant now building for making steel bars and allied products will be completed. The

Conneaut plant will take care of the lines of pipes and tubing, which is regarded as a branch which is bound to develop largely. It is understood that plans have been completed for the building of a very large sheet mill, if in fact the contracts are not already placed for the machinery.

An outlet for additional steel is to be sought in wire rods, although that will probably not be taken in hand for some time to come.

At the same time, the Carnegie Company was proposing to secure an independent line to the seaboard by way of the Western Maryland Railroad and the abandoned route of the South Pennsylvania.

These announcements caused serious anxiety to the leaders of the newly formed consolidations in the Central West. In the Chicago district, it was believed that the carrying out of the plans of independence conceived by the management of the American Steel & Wire Company had only been postponed to a more favorable season. The fighting strength of these two companies was so nearly equal that permanent peace could not be expected in view of the large inducements offered by independent control of the materials of production. At any time, the harmony in the steel trade of this section might be destroyed, and monopoly earnings reduced to a competitive basis. In the Pittsburgh district, the Carnegie Company threatened with its competition the four Moore companies, the Steel & Wire Company, and the National Tube Company. There was a general belief in the sincerity of Mr. Carnegie's emphatic declarations. The iron and steel trade of the Middle West seemed about to descend into the depths of a competitive struggle, wherein the seller, who for a short time had been the master of the buyer, should again be his servant.

The Threatened Competition of the Carnegie Steel Company

The situation in the Pittsburgh district was of peculiar menace. The Carnegie Steel Company owned the most

complete, the best-equipped, and the best-managed steel plant in the United States. The perfection of its equipment in point of independent supplies of materials and transportation service has been already described. No one of its rivals was worthy to be compared with it in point of self-sufficiency of production. This equipment supplied ore and fuel to the mills which were grouped so closely about Pittsburgh that the president of the company was able to visit some department of each mill on successive days. All the plants were connected by the Union Railway, with thirty-nine miles of track, which, in turn, connected with the Pittsburgh, Bessemer & Lake Erie Railroad to the north. This arrangement of mines, coke ovens, and mills was the most favorable that could have been devised for economical production.

The mills of the Carnegie Steel Company were concentrated at the point of largest present advantage, where materials could be most easily assembled, and from which the largest markets could be most easily reached. It was this fact of concentration, even more than their superior facilities, which gave to the Carnegie Company their most pronounced advantage. The mills of their rivals were too widely scattered. Their location antedated the recognition of Pittsburgh as the natural seat of the iron and steel industry. Mr. Carnegie had anticipated his rivals by twenty years. All the benefits of centralization which they were striving for, he had long since achieved.

The advantages of the Carnegie Company did not stop here. Their mechanical equipment was superior to that of any other mills, and their business was the best managed of any in the country. The superior equipment of the Carnegie works was the result of a policy of large expenditure upon betterments persistently pursued for many years. "Every new process and every new machine which would in any way increase the efficiency, reduce the cost, and improve the product of the Carnegie Company has been

adopted, until this great concern has raised the physical condition of its mills to a point which is unsurpassed." Dividends had never been considered by the management. Improvement had been the one thing thought of. During the years 1898 and 1899, the Carnegie Company expended out of earnings upon new construction and betterments no less a sum than $20,000,000. This new capital came out of profits. The increased carning power here represented clear gain. No deductions had to be made for interest payments. The policy of the Carnegie Company was purely industrial. Financial considerations had little weight. Its shares were never in the market. The greater part of its profits was each year invested in the plant. As Mr. Carnegie remarked, he and his partners knew little about the manufacture of stocks and bonds. They were only conversant with the manufacture of steel.

The situation was made more critical by the fact that the man who had built up the Carnegie Company was still in active control of its affairs and directing its policy.

The *Iron Age,* on May 11, 1899, remarked as follows:

> Mr. Carnegie has carried the American iron trade with him. He has been the unswerving advocate and his plants the most shining examples of the policy of running to full capacity. He has been the man above all others who created and fostered the ambition of record-breaking. He has more than any other producer spent money lavishly in equipping his plants with the very latest appliances, who has invested earnings most promptly in enlargements. He has set a pace in the iron trade of this country which all have been forced to follow. He has been more than any man the type of the untiring, incalculable exponent of unrestrained competition which the younger generation of business men and manufacturers may admire but do not care to imitate.

Danger to the New Steel Companies from Carnegie Competition

The results of this competition were clearly foreseen by those in control of the consolidations. In view of their

small reserves, taken in connection with their other disadvantages, a decrease in profits would be the signal for the passing of dividends, and a fall in the value of their stocks. Not only this, but industrial warfare demands new appliances and large construction, which could only be paid for by issuing bonds, or adopting the more dangerous course of increasing floating debt. In either event, the decline in the value of stocks, due to decreased earnings, would be confirmed for years by placing fixed charges ahead of dividends. The steel stocks were but weakly held. With the possible exception of National Tube preferred, they had no investment standing. The interests in control of the consolidations owed it to their stockholders to use every means in their power to avert the impending calamity.

Underwriting Commitments in Steel Stocks

Not only were the leaders of the steel trusts under obligations to their stockholders to prevent the threatened disaster, but considerations of private advantage inclined them to the same course. The flotation of the steel trusts had involved the provision of large sums by underwriters, who, with promoters and the original owners of the various plants, expected to make large profits from the sale of stock to the public. These expectations of profit had been disappointed. The securities of the steel companies first formed—Federal Steel and American Steel & Wire—went off readily enough, but the trust business was so greatly overdone during the first six months of 1899 that, in the flotation of most of the consolidations organized during that period, underwriters were obliged to take and pay for large blocks of stock, and to hold this stock for a more favorable market, being unable to take their profits. The offering of trust shares was too great for easy consumption. The public appetite was dulled by huge feeding. During the last six months of this year, a general decline took place

from the list prices of the trust stocks, the steel stocks suffering with the rest. This decline was accentuated by the panic of December 18, 1899, and continued, with but little check, until October, 1900. Underwriters and promoters, unable in such a market to dispose of their holdings of trust stocks profitably or safely, found themselves in the position of controlling the policy of the new companies.

Steel was not popular with the speculators, and, in a declining market, the steel stockholders were heavy sufferers. After the certainty of Republican victory had strengthened the position of the consolidations, however, these stocks began to advance in sympathy with the general movement. The long-deferred hopes of the insiders seemed about to be realized. The public was willing to buy their shares, and, in the unreasoning market which followed the election, the higher the price of a stock was pushed the more eager were the speculators to buy it. Sales of all the steel stocks showed considerable gains. The underwriters and promoters were at last able to sell their holdings on an advancing market, and to take their long-deferred reward for services rendered. Every indication pointed to a great bull movement in steel stocks, which was supported and strengthened by a rising tide of demand in the steel market.

The realization of deferred profits, which the advancing market was making possible, would be broken off by the threatened outbreak of hostilities between the great companies, and those in control of the steel trusts had, therefore, a double motive to prevent competition. Their obligations to the other stockholders of the steel trusts, and their own interests as the largest stockholders, made it imperative that the values of the steel stocks should be protected. Failure to arrange an amicable settlement of their difficulties would not only inflict severe losses upon them, but would lock up their cash resources at a time when the formulation of new projects of consolidation promised large profits.

Necessity of Protecting the Values of the Steel Stocks

The financial situation in the beginning of 1901 must be understood if the formation of the United States Steel Corporation is to be explained. The problem presented by the attitude of the Carnegie Steel Company was not to be solved by exclusive reference to industrial considerations. If the consolidations had been controlled by steel producers, a fight might have been made. The passing of dividends could not affect the control. The small indebtedness of the consolidations gave a reserve for competition in the issue of bonds equal to the minimum earning capacity of the plants. The conflict would have been severe, but the Carnegie Company, in spite of its strength, could not, in all reasonable probability, have ruined its debt-free competitors. It could only force them to enlarge the field of their operations by new construction, and, when an armistice had been declared, the other steel consolidations would retain their control of the raw materials, the capacity of their plants would be enlarged, and if bonds had been issued, the assets side of their balance sheets would have been correspondingly increased. The next upward movement in the iron and steel trade would have found the consolidations ready for the demand, and would have enabled them to recoup their losses by obtaining a larger share of the rapidly increasing demand for iron and steel.

Competition has no terrors for well-managed industrial industry. It is only financial industry which dreads a reduction of profits. The Midvale Steel Company, or Jones & Laughlin, Ltd., could pass through a period of depression without disaster, and with substantial increase of plant and equipment. The National Tube Company could have done the same if its preferred stock had not contained the cumulative feature, and if its securities had been held for investment and not for sale.

As it was, however, it was necessary to the controlling interests in the steel trusts, not merely in order to protect

their own holdings, but to retain their prestige with the speculative public, and to prevent a general decline in stock values, that the threatened steel war should be avoided. The steel industry, as such, was in no danger from competition, but the financial control of the steel industry was in great danger, and that control must be protected. Mr. Carnegie could not have chosen a better time to make his attack than when the leading financial interests of the country were anxious to engage in new operations, to whose success a decline in the value of the steel stocks might have proved disastrous—disastrous, not merely because of the loss of confidence in their projects which the passing of steel dividends would cause, and the chill and paralysis of speculation which would follow, but because of the locking up of capital in securities whose values, raised with so much care and after so long a time, the threatened competition would seriously reduce. Mr. Morgan and his friends would have been unworthy of the confidence of the investing and speculative public, had they not done everything in their power to avert the disaster threatened by a steel war.

Two Alternatives Offered to the Bankers

There were only two ways by which the controlling interests of the steel trusts could avert the impending calamity. One was to make an abject surrender to the Carnegie Company. This would have inflicted a severe blow upon their credit, and would have meant giving up all the plans of industrial independence which have been included in their schedules of advantages, and upon the attainment of which their capitalization had been in part based, besides leaving the danger of competition still present and no longer concealed. The other was to adopt a plan which would harmonize all the conflicting interests by uniting them into one corporation organized to own a majority interest in the various steel companies which it

was necessary to control, and in this way to remove permanently the danger of competition.

In a declining market the second alternative could hardly have been chosen. But in the great bull movement in the spring of 1901, all things were possible. The United States Steel Corporation was backed by the strongest financial houses in the United States. It included the Carnegie Company, the strongest steel company in the world; it completely realized the ideal of independence for which all the merging companies had been striving; it exorcised the forbidding specter of competition; and it was offered to the public at a time when the speculator was able to appreciate these advantages at something more than their real value. Instead of a heavy loss with which Mr. Carnegie threatened them, the stock of the constituent companies was taken into the United States Steel Coporation, on the basis of an increased capitalization, and while the Carnegie Steel Company stockholders received securities with a market value of over $400,000,000 for their holdings, the great value of the Carnegie properties, and particularly the permanent elimination of the Carnegie competition, warranted this high payment, three-fourths of which was in first mortgage bonds, secured by a lien on all the stocks acquired. The Steel Corporation has been brilliantly successful. Its position of dominance has never been seriously threatened. It still produces nearly half the steel of the United States. By 1930, twenty-nine years after its organization, it had retired most of its bonds, and its common stock which, at the time of organization, represented only hope and expectation, although increased by a stock dividend of 40 per cent, in August, 1929, sold at $290 on a par value of $100.

Summary of Financial Considerations Present in Consolidations

The events leading up to the organization of the United States Steel Corporation show a phase of business which

is usually present in all consolidations. The desire to increase profits by restricting competition; the necessity of including strong and dominating concerns whose owners do not need to sell, who perhaps do not want to sell, but whose reluctance is overborne by very liberal offers; the coöperation of banking houses who furnish the cash required, and arrange a market for the securities, an intermediate stage of ownership, while the securities of the new company are passing through the hands of speculators, frequently margin speculators, to their final holding by investors. Back of these financial considerations are the well-known economies of combination and the advantages of big business which must be realized if the securities of the consolidation are to reach an investment standing. But the primary purpose is always to make money, quick money, by selling in the form of new securities, in form and amount to make the largest public appeal, productive values which in first hands could be sold with difficulty and at low prices.

CHAPTER XL

METHODS OF CONSOLIDATION

The methods of uniting corporations by consolidation are three: first, the merger; second, the purchase by one company of a controlling stock interest in another; third, the lease.

The Merger

When a merger of corporations is accomplished, one or more of the companies concerned loses its identity in another. Suppose the case of two gas companies—A and B—competing for the business of the same town. A sufficient amount of the stock of B has been acquired in the interest of A, to control the sale of its assets and its dissolution. Two methods are available for merging B with A. First, A may offer its stock or bonds or cash in exchange for the stock of B, having acquired the amount of stock which by the laws of the state or the charter of B is necessary to assent to the sale of B's assets. The directors of B now sell the property of that company to A. If all the stock of B has been acquired, the consideration need be only nominal. A now controls all the stock of B, and secures the dissolution of B, in the manner provided by law. The second method is for A to purchase the property of B, at its market value in securities or cash. B has then in its treasury the proceeds of the sale. B is then dissolved, and the directors distribute its assets to its stockholders.

Objections to Merger

The method of merger is sometimes not available. There is often some advantage to a company acquiring control of another company, in continuing the corporate existence of its subsidiary. Companies which have been in existence a sufficient length of time to establish a reputation have a certain goodwill value in connection with their name which would terminate if their corporate existence were ended. Valuable privileges may also be lost if the method of merger is adopted. For example, a gas company operating in a large city where a rate of $1.00 per thousand feet shows substantial profit may control various suburban gas companies whose rates, because of higher cost of operation, may be $1.50 per thousand. A consolidation with these suburban companies would result in lowering their rates. Their corporate existence may, however, be maintained without merger, by the method of stock control, and the high rates continued. The salary accounts of the subsidiary companies are nominal, and the operation of their property can be merged if desired by leasing their property to the main company, or by operating them as divisions or departments of the parent company.

Illustration of a Merger

A recent illustration of the method of merger is the absorption of the United States Sheet & Window Glass Company by the Libbey-Owens Sheet Glass Company. The terms of purchase were as follows: All the property and assets of the United States Company were sold to the Libbey-Owens Company. Payment was made as follows: $3,847,346 in cash, which was used to redeem the preferred stock of the United States Company, 9,188 shares of Libbey-Owens common stock, and 38,250 shares of United States common stock, belonging to the Libbey-Owens Company, or as an alternative to this United States stock, an additional 9,562 shares of the Libbey-Owens common stock. All cur-

rent liabilities of the United States Company were paid by the Libbey-Owens Company, except expenses, income taxes, if any, or other liabilities incurred by reason of the sale. When its affairs were settled and the United States Company was dissolved, its common stockholders received, for each share, one-quarter share of Libbey-Owens stock. The option above referred to must, of course, be exercised, since, when the United States Company was dissolved, its common stock would have no value. The method here indicated is that ordinarily followed: the retirement of redeemable senior securities, the assumption of current liabilities, and the purchase of the merged company with the stock of the survivor.

In this case, and similar stipulations are usual in these offers, the offer was contingent on the assent of 85 per cent of the United States common stock. Nonassenting stockholders of this small amount cannot block the merger, but have the right to their pro-rata share of the purchase price, the fairness of which can be ascertained by appraisal. Such appraisals, as a means of protecting the interest of nonassenting stockholders, are usually provided for by law.

Financial Moves Preliminary to Consolidation

It often happens, as a preliminary to any form of consolidation, and in order to make sure that a large majority of the stock of the company to be absorbed will vote in favor of the plan, that the owners or bankers of the merging company will quietly or openly buy a controlling interest in the stock of the company which they desire to absorb. This is usually done when the stock is undervalued so that there is no risk of loss if the merger does not go through. When, for example, the Kansas City Southern was proposing to form a consolidation with the Missouri-Kansas-Texas, and the St. Louis & Southwestern, although there was no intention to end the corporate existence of the road last mentioned, the Kansas City Southern had purchased

250,000 shares of Missouri-Kansas-Texas common stock, a large amount of which was purchased in the open market. The Kansas City Southern also purchased 135,000 shares of preferred, and 20,000 shares of common of the St. Louis & Southwestern. This stock was afterwards sold at cost to the Missouri-Kansas-Texas when the Interstate Commerce Commission refused to approve the proposed consolidation of the three companies, and instituted proceedings against the Kansas City Southern, alleging an unlawful combination in restraint of trade. The Kansas City Southern, however, had already sold a large amount of this stock, and offered to sell the remainder as soon as market conditions permitted, so that the Commission finally withdrew its action. Considerable profits were made on these sales.

When the method of preliminary stock purchase is not selected, the method followed, which may also be used when purchase of a control has been secured in advance, is to state the terms of the offer to all the stockholders, and to invite deposits of the stock with individuals or institutions, under an agreement by which each depositing stockholder authorizes the voting of his stock to carry out the proposed merger. Informal understandings with large stockholders usually precede such an offer.

Consolidation by Stock Ownership

The second method of consolidation is that of stock ownership. One operating company can purchase the stock of another, giving in exchange cash or securities, or a holding company can be organized for the purpose of holding the stocks of other companies which, by this device, are brought under centralized control.

Amount of Stock Necessary for Control

How much stock is it necessary for a company to acquire to control another? The rule of law is that, in the absence

of a provision allowing stockholders to accumulate their votes on one or two directors, thus insuring to the minority representation on the board, a bare majority of the stock can elect, if the owners wish, all the directors. While the rights of the majority are seldom pushed to this extreme, the holders of a majority of the stock always constitute a substantial majority of the board of directors. There is no general reason, therefore, for acquiring all the stock of a corporation in order to control it.

Necessity to Eliminate a Minority under Certain Conditions

Where the interest of the parent company may be opposed to the interest of the subsidiary company, there is no alternative, if it is desired to maintain the identity of the subsidiary, save for the parent company to acquire all of its stock, or to see that its control is held in the parent company's interest. Many of the consolidations of manufacturing concerns have resulted in the closing of badly located or otherwise unprofitable mills in order to concentrate the production in plants which are better equipped or better located. This policy makes for the interest of the parent company. It is, however, opposed to the interests of minority stockholders of the corporations owning the plants whose operation is discontinued. If their businesses were to be closed up in this manner, these companies would be ruined. The minority stockholders would appeal to the courts which would give them protection against the depreciation in the value of their shares which would follow the suspension of dividends on their stocks.

Illustration of Threatened Exploitation of a Minority Stock Interest

A recent illustration of the possibilities of majority control by an adverse interest is furnished by the controversy between the Shell Oil Group, which owns a controlling in-

terest in the V. O. C. Holding Company, Ltd., and the minority stockholders. The Shell Company buys the crude oil output of the V. O. C., which is the largest individual producer of crude oil in the world. The minority committee charges the Shell Group with forcing V. O. C. into a contract which provided, among other things, for 36 cents a barrel for transporting its product from Lake Maracaibo to Curaco and delivering it on board vessels, a compensation which the committee "is advised is grossly excessive." The minority also charge that the correct policy for their company is not to remain dependent on the willingness of the Shell to buy the crude oil, but that they should provide their own transportation and oil refining facilities. They conclude with a quotation from the London *Times,* which sums up the dangers in such adverse control.

> The controversy really arises out of the present dual relationship of the Shell Company and the V. O. C. The Shell Group holds the majority of the shares of the V. O. C., it manages the property, and acts both as buyer and seller of oil. So long as the present dual relationship exists, it will present frequent opportunities for criticism.

In the nature of such a case, it is impossible to preserve an even balance between the interests of controlling and of controlled companies. Absorption of substantially all of the minority stock is the only way by which the majority can avoid the possible danger of a controversy with a minority interest. This point was emphasized by the Interstate Commerce Commission in rejecting the Loree combination in the Southwest. The majority of the commission pointed out that control of a majority of stock of a railroad by a competitor constituted a very real danger. If the Kansas City Southern owns only little over half of the outstanding voting stock of the Missouri-Kansas-Texas, it would be greatly to its advantage to draw business away from the latter at all junction points. It would gain far more in earnings

from this divided traffic than it would lose in dividends. To avoid such trouble, it is usual to secure all the stock of the company to be consolidated, in case this can be purchased at reasonable figures.

Guaranteed Dividend on Minority Stock

If all the stock cannot be acquired, and in case the subsidiary company is to be used for the benefit of the interests which control it, rather than for its own benefit, a method, which has been employed in many cases, is to guarantee a dividend on the minority stock of the subsidiary. This plan was followed by the Carnegie Steel Company in 1901 in guaranteeing 4 per cent on the minority stock of the Pittsburgh, Bessemer & Lake Erie Railroad Company, whose principal freight, since its organization in 1897, had been ore destined for the Carnegie furnaces. The minority stockholders of the railroad company complained that their failure to receive dividends was due to the fact that the owners of the majority of their stock of the Carnegie Steel Company received such low rates on its ore that the railroad company was unable to make a profit. In order to quiet this criticism, the Carnegie Steel Company, through a subsidiary company, the Bessemer & Lake Erie, guaranteed a dividend on the Pittsburgh stock, leaving itself free to fix rates as low as it thought best.

When May a Minority Stock Interest Control?

When the consolidation is for mutual benefit, there is no advantage in exploiting any member for the benefit of another, and the minority stockholders have no good reason to feel aggrieved by the acts of the controlling interest. Moreover, where the stock of a company is widely scattered, a controlling interest may be much less than a majority. The Pennsylvania Railroad Company for seven years exercised a potent influence in the directorates of the Baltimore & Ohio, the Chesapeake & Ohio, and the Norfolk

& Western, and still controls the company last mentioned. At no time, however, did it own a majority of the stock of any of these companies with the exception of the Norfolk & Western for a short time. Any contest for control, however, during the period of the Pennsylvania's influence, would have been hopeless, owing to the control of the administrative machinery of these companies in the interest of their principal stockholder, and to the advantage which this control would have given these officers in soliciting voting proxies.

Speculative Holdings Figure in Stock Control

In further explanation of the ease of controlling large public companies, let me cite the fact, well known, but little regarded, that a large amount of such stock is frequently in brokers' offices as collateral for brokers' loans and standing in the brokers' names. Brokers depend upon banks to furnish them the money to carry on their business. Banks are friendly with corporation directors and officers who direct the large deposits of the companies this way or that. Where these brokers' proxies are desired by the company, an intimation from the bank where the broker carries his account that it would be a favor to them if the proxies were furnished is all that is required to produce them. An individual stockholder or group of stockholders without these financial affiliations would have no chance to get these brokers' proxies. Under a recent regulation of the New York Stock Exchange, brokers are required to advise the owners of the stocks held in their offices of the request for proxies and to request instruction. If no instructions are furnished, the broker is free to vote the stock as he wishes.

Consideration Offered in Stock Purchase

Having settled upon the amount of stock required for control, how may this stock be acquired? Stock may be

purchased for cash, or with the stock or bonds of the purchasing company, or with stock trust certificates on which dividends are guaranteed by the company acquiring the stock. The consideration which will be offered and accepted in the sale of stock control can be viewed from the standpoint of the purchasing company, and also from the standpoint of the stockholders who sell their holdings. A purchasing company, if its surplus over its regular disbursements is substantial, can safely offer bonds or their cash equivalent to holders of stock which it desires to purchase. Other things being equal, an offer of bonds is especially desirable from the seller's standpoint. He receives a promise to pay, secured not only by the credit of the buyer, but by the stock sold. If interest is not paid, the stock can be recovered. If the purchaser is in a strong financial position, and if there is a prospect that the stock purchased will become more valuable in the hands of the purchaser, the method of purchase by bonds is likely to be adopted. The stockholders who receive bonds for their holdings surrender all right to future shares in the profits of their company over the amount guaranteed on their bonds. The purchasing company, by giving them a secured claim, succeeds to their right to share in profits over the amount paid in interest.

In some cases these purchases of stock with bonds have proven immensely profitable. In 1898 the New York Central purchased $45,000,000 out of $50,000,000 of the capital stock of the Lake Shore, Michigan & Southern, giving in exchange its 3½ per cent bonds at the rate of $200 in bonds for $100 in stock. The 7 per cent dividends on the Lake Shore stock represented the equivalent of the interest paid on the bonds issued in payment. From 1899 to 1903, the Lake Shore paid 7 per cent; from 1904 to 1906 inclusive, 8 per cent; in 1907, 12 per cent; in 1908, 14 per cent; and in 1909, 12 per cent. Later dividends were larger, until the Lake Shore was merged with the

New York Central. The purchase of the Lake Shore stock proved most fortunate for the New York Central. There is the more reason to adopt the method of purchasing stock with the bonds of the purchaser, if the stock desired is a dividend payer, since then a substantial portion of the interest on the bonds can be provided out of the stock purchased.

Preferred Stock Rather than Bonds Frequently Offered

When any doubt exists, however, concerning the ability of the purchasing company to meet the interest on a sufficient bond issue to buy the stock which it desires, prudence demands that stock be used. Cumulative preferred stock is the type of security usually employed. The failure to pay dividends on such stock does not work the bankruptcy of the issuing company. The United States Rubber Company, in a circular to its stockholders recommending the purchase of stock of the Rubber Goods Manufacturing Company, stated the argument against bonds and in favor of preferred stock as follows:

> If no better means were provided, it might be advisable to make such purchase by the use of collateral trust notes, but it occurred to the management that rather than subject their stock to the prior fixed charges of such collateral trust notes, the stockholders might prefer to provide the means of purchase by an increased issue of stock, the preferred stock of the Rubber Goods Manufacturing Company to be acquired by an issue of new first preferred stock of the United States Company in amount equal to that of the Manufacturing Company, and with dividends limited to eight per cent annually.

Even where bonds can safely be employed, the importance of preserving the credit of the purchasing company influences the use of stock to acquire other stock. The issue of bonds to that extent exhausts the credit of the buying corporation. If stock can be used as the means of purchase, the company's borrowing power is not weakened.

Considerations Influencing the Demand for Senior Securities in Stock Purchase

From the standpoint of the stockholder, the acceptance of an offer for his stock may be influenced by various considerations. If he is not satisfied with the prospects of his own investment, there is little trouble in inducing him to accept a fair offer. For example, at the time of the formation of the United States Steel Corporation, based on the Carnegie Steel Company, the Carnegie Steel Company threatened with its competition every one of the large industrials whose stockholders were asked to exchange their holdings for United States Steel stock. The necessity of averting this peril, and the advantage of an alliance with the strong Carnegie Steel Company produced practically unanimous acceptance of the offer of the United States Steel Corporation to the stockholders of the separate companies. The Carnegie Steel Company stockholders, not only because of the great earning power of the properties, but because the consolidation could not be formed without them, demanded and received much better terms than those offered to the stockholders of other members of the consolidation. Mr. Andrew Carnegie, in particular, the majority holder, received all of the first mortgage bonds of the United States Steel Corporation, about $300,000,000, for his holdings—an excellent illustration of a high nuisance value.

Basis of Allotment in Exchange of Stock

While there is always a trading element in fixing the shares of the stock of a consolidation which are allotted to the companies taken in, the basis of allotment is the value of each to the new company. In the consolidation of the Abitibi Power & Paper Company, Ltd., of Canada, for example, with certain smaller companies in 1927, which was accomplished by the exchange of stock of the Abitibi Company, the basis of exchange was as follows: Spanish River

Pulp & Paper Mills, two shares of Abitibi stock for each share of common, Ft. William Power Company, one share, Manitoba Paper Company, $^{18}/_{25}$ of one share, St. Anne Paper Company, $^{9}/_{10}$ of one share, Murray Bay Paper Company, $^{1}/_{2}$ share. President Alexander Smith, in a letter to the stockholders of the Abitibi Company, explains the method of valuation as follows:

In arriving at the basis of exchange as recommended, due consideration has been given to all pertinent facts having any bearing on the present and future values of the constituent equities. All companies have been ably represented and every divergent opinion has been fully discussed with a view to complete fairness to all shareholders. On account of the diversity of conditions in each company, it has been impossible to arrive at any mathematical basis, or to find a common denominator to which the calculations might be reduced. It was therefore necessary to determine as accurately as possible the unquestioned value of the shares of a united company, and the division of these shares among the shareholders of the constituents on the basis of the value each company is fairly contributing to the whole. Financial condition, capitalization, earnings, history, location, equipment, wood reserves, abilities and disabilities past, present and future, have all been discussed and considered in arriving at the final result.

It is usually impossible, as Mr. Smith shows here, to arrive at any formula by which to determine the amount of stock in a consolidated company which is allotted to each company absorbed. The test is not what each company is worth as an independent entity to its stockholders, but what is it worth to the consolidation. A paper company, for example, may have shown no earnings. It may have been operating at a loss for several years and its balance sheet may show a large deficit. On the basis of a comparison of balance sheet figures, such a company may have but a small value. At the same time, paper companies need large wood reserves, and the unsuccessful company may have such reserves. If its stockholders are well represented

in the negotiations, they may receive a value in the new stock, far out of line with the figures shown in their reports, but a reasonable value when the advantage of their large lumber holdings to the consolidation is taken into account. Instances are numerous where companies have been taken into consolidations at figures based primarily on the ability of their executives. Ajax Rubber and Chrysler-Dodge are cases in point. Another important consideration is the financial condition of the various companies. If a company, otherwise desirable, has a large amount of senior securities, bonds, and notes, or even preferred stock, which it is necessary to clear away by payment in cash, the amount of consolidated company stock, which can be allotted in this case, may be considerably reduced. In bank consolidations, where the assets consist mainly of money, or money's worth in commercial paper, or securities whose value can be accurately determined, the method of a share in a common denominator for each member of the consolidation can be more closely followed, and there is less occasion to estimate and approximate.

Dangers to Stockholders Who Accept Stock in a New Company

Consolidation, from the standpoint of a stockholder of the constituent companies, usually involves an element of risk and uncertainty which must be taken account of in fixing the terms of exchange. His present position is known to him. He may be receiving high dividends and a salary as well. If the consolidation is not successful, he may lose his dividend, and his salary, although important stockholding officials are usually taken over, may not be permanent. This attitude of mind represents an obstacle which must be overcome among other methods by the terms of the offer. It also influences, in many cases, the form of the consideration.

Instances are not lacking where stockholders have given

up dividend paying stock in return for stock which paid them nothing. A case in point is that of the Atlantic Transport Company, whose stockholders went into the International Mercantile Marine Company, exchanging their stock, on which they had been receiving regular dividends, for the stock of a large company on which they received nothing for many years. With a weak company or a new company offering to purchase, and especially when a corporation is organized with the sole purpose of acquiring the stocks of other companies, unless there are strong reasons urging consolidation, and unless bonds are not available, an offer of common stock will not, as a rule, prove attractive. The holders of the desired stock demand either collateral trust bonds secured by the stock purchased, and with the provision in the indenture that in case of default the bonds can be employed to purchase the stock, or they demand cumulative preferred stock bearing a high rate of dividend. An additional bonus of common stock is usually demanded by stockholders of strong companies.

Cash or Stock Frequently Offered

With an active stock market and excellent business prospects for the new company, this hesitation of stockholders to exchange dividend paying stock for other stock is overcome by a cash offer for their shares.

In the numerous recapitalization plans, which the abundance of capital since the War has produced, the consideration has been cash to the owners, transfer of control to the bankers, and a prompt resale to the public. Dodge Brothers, National Cash Register, and Victor Talking Machine are recent examples.

This cash offer may be accompanied by an alternative offer in securities. It has been said that "mankind dearly loves an option." Just as a bank depositor, if he is sure of obtaining his money on demand, does not want it, so a stockholder offered a choice of cash or securities of a new

company is far more likely to accept the offer of securities, than if he did not have a choice between securities and cash. The underwriting syndicate may be very helpful in such a situation, by offering to provide the cash for those stockholders who prefer it. With responsible bankers ready and apparently anxious to step into their shoes, doubting stockholders are more strongly inclined to sell for the securities which these underwriters stand ready to take. A notable example was the purchase by the Great Northern and the Northern Pacific of the Chicago, Burlington & Quincy in 1901.

The official circular announcing the joint offer of the Great Northern and the Northern Pacific to purchase the stock of the Chicago, Burlington & Quincy stated that "The purchasers will pay cash instead of bonds to an amount not exceeding in the aggregate $50,000,000 to those shareholders who shall prefer to receive payment partly in cash; and J. P. Morgan & Company, as managers of a syndicate, have undertaken to provide such cash, and to take therefor such bonds at par and accrued interest. You are accordingly offered the privilege of selling your stock at $200 per share, payable wholly in the 4 per cent described above, or in bonds to the amount of $160 and cash to the amount of $40." Here there could be no question that the bonds were worth 80 to the Burlington stockholders, and nearly all of them, partly as a result of the syndicate offer, elected to take the bonds in full payment.

The Stock Trust Certificate

As a compromise between the stock and the bond, a company purchasing stock may employ the stock trust certificate. In 1909, for example, the Minneapolis, St. Paul & Sault Ste. Marie Railroad Company acquired most of the preferred stock of the Wisconsin Central with its leased line stock certificates secured by a deposit of the stock purchased, on which 4 per cent is guaranteed for ninety-

nine years. These stock certificates do not differ essentially from a collateral trust bond. In case of default, the holders of the certificates receive back the stock from the trustee and can sue for unpaid dividends. The obligation of the certificate is, however, a contingent and not a direct obligation, and on that account is more acceptable to the stockholders of the purchasing company.

CHAPTER XLI

THE LEASE

The lease has already been defined as a contract by which possession of certain property is transferred from the owner known as the lessor to some other person or corporation known as the lessee, the title to the property remaining in the lessor, but the possession and use vesting in the lessee under conditions set forth in the lease.

Provisions of the Lease

Corporate leases contain provisions covering the following points:

First, a description of the property, usually in the form of a complete inventory, which must be kept up to date, since the nature of corporate property is likely to be constantly changing. For example, the property of a street railway company, where the motive power is in turn changed from horse power to cable, then to the overhead trolley, and finally to the underground trolley, may be entirely different at the end of a ten-year period from what it was at the beginning. If this property is to be leased to another company, it is important that the inventory be revised at regular intervals.

Second, the length of the lease. It is usual to make corporate leases for long terms, ninety-nine years being common, and 999 years not unusual. When leases are made for shorter periods, options of renewal on certain terms are usually inserted.

Third, payments under the lease. Corporate leases usually provide that taxes, insurance, interest, and expenses

of maintaining the corporate organization of the lessor shall be paid by the lessee. In addition, the payment for the lease to the lessor is usually made in the form of a dividend upon the capital stock of the lessor as then outstanding. It may also be provided that the lessee shall pay as rental for the property a certain proportionate part of the gross earnings or of the net earnings. This method places no limit to the participation of the owner in the profits of the property. These payments are frequently made on a sliding scale so as to permit the stockholders to share in the expected increase in profits.

Special Forms of Leases

Rentals under mining leases are usually fixed on the basis of the tonnage extracted, either as a percentage of the gross receipts, or at a fixed rate per ton. It is usual to stipulate for the payment of rental on a certain number of tons, whether or not this number is extracted. Oil leases generally account to the landowner for the value of one-eighth of the output.

Leases to building corporations are extensively used in the Middle West in connection with Land Trust Certificates. Under this plan, central real estate is transferred to a trustee who issues certificates of beneficial interest in the property. These certificates are sold to investors. The trustee then leases the property to a building corporation for a long term of years at a fixed rental sufficient to net 5½ per cent, free of all taxes including normal income tax. The lease contains the option to purchase at a price to yield a profit to the certificate holders, and a sinking fund may also be maintained as a deduction from the net earnings of the lessee.

Provisions for Maintenance of Leased Property

Corporate leases provide in great detail for the maintenance of the property. This point needs to be more care-

fully guarded in short term leases than when, for example, ninety-nine-year leases are made. If the maintenance of leased property is not carefully looked after, as the date when the lease expires approaches, the lessee, unless he expects to renew the lease, will allow the property to deteriorate, making as much money as possible during the last year or two of his occupancy. In order to protect the lessor against such an abuse of his rights by the lessee, there is usually reserved to the lessor the privilege of examining its physical condition. A typical provision for maintenance is the following, taken from the lease of the property of the Manhattan Railway Company to the Interborough Rapid Transit Company:

The lessee covenants and agrees, at its own proper cost and expense, to maintain, operate and run the demised railroads and property during the said term in the same manner as the lessor is now or shall at any time hereafter be required or authorized by law to do; and shall and will keep all insurable property insured in reasonable amounts and rebuild all buildings and replace all property destroyed or deteriorated by fire or otherwise, to such an extent as to be unfit for use; and shall and will maintain, preserve and keep the railways and property hereby demised, including all property hereafter acquired, and every part thereof, in thorough repair, working order, and safe and efficient condition, and supplied with rolling stock and equipment, so that the business of the said demised railways shall be preserved, encouraged and developed, the business thereof be done with safety and expedition, the public be accommodated in respect thereto, with all practicable convenience and facilities, and the future growth of such business as the same may arise or be reasonably anticipated be fully provided for and secured.

The lessee further covenants and agrees, at the expiration or termination of this lease for any cause, to return and deliver the said railroad and railroads, real estate, and properties by this lease demised, including, among other things, all property, additions, improvements, and equipments which shall be furnished, constructed, or completed out of the proceeds of sale of the stock, bonds, or property of the lessor, to the lessor in as good order, condition, and repair as they were at the date this lease takes

effect, or at the date when the same came into the possession of the lessee, and to surrender said franchises, rights and privileges, easements and properties unimpaired by any act of the lessee; excepting, however, all property of the lessor sold pursuant to the terms thereof, the proceeds of which shall have been applied as herein provided.

The lessee further covenants and agrees that it will, at all times during the continuance of this lease, at its own expense, keep the said rolling stock, and tools, equipment, machinery and implements necessary for the operation of the road, in good order, condition and repair, and will, as the same shall be worn out and rendered unserviceable, replace the same at its own expense, so that the said railroad and railroads shall always be kept, maintained and equipped in good and safe condition and effective working order.

The lessee further covenants and agrees that it will at all times during the continuance of this lease, at its own expense, comply with all lawful requirements with respect to the construction, maintenance and operation of said railroads, extensions or branches thereof.

Disposition of Proceeds of Leased Property Sold

In corporate leases, when the instrument covers, for example, a large and complex street railway system, it frequently happens that some portion of the property of the lessor is no longer of use to the lessee. It is for the interest of both parties that this property should be sold. Provision is usually made, therefore, for the sale of such property, with or without the consent of the lessor, but invariably with the stipulation that the proceeds of the sale are to be invested in improvements upon the lessor's property. In other respects the language and form of a corporate lease closely follows the corporate mortgage, the main objects being to preserve the physical condition of the property and to protect the lessor against any claims or charges arising from the breach of any obligation connected with the property released. If the property is mortgaged, such a stipulation is, of course, necessary, and the consent of the trustee of the mortgage must be obtained.

Advantages to Stockholders of Lessor Company

A proposition made by a strong company to stockholders of another corporation to lease their property at a rental corresponding to the dividends which they are then receiving is very attractive, and it is not so essential to make sure of their acceptance by purchasing enough stock to control the board of directors of the lessor company, as when a proposition is made to purchase the stock. A typical proposition of this character is indicated in the following offer:

> The Indianapolis Terminal and Traction Company offers to lease the property of the Indianapolis Street Railway Company, guaranteeing the payment of interest, taxes, etc., and also dividends on the street railway stock of one per cent on January 1, next; and thereafter semiannually 3 per cent for the first year, 4 per cent for the second year, 5 per cent for the third year, and from July, 1908, 6 per cent. The term of the lease is for thirty years, which is the unexpired life of the Indianapolis Company's franchise from the city.

Advantages to Lessee Company

The advantages of the lease, from the standpoint of the lessee, are equally evident. The lessee company obtains the control of property without the outlay of any money, and usually on terms which leave them a margin of profit after making the payments required by the lease. If property is to be built, a large amount of financing is necessary. Bonds or stock must be sold, and extensive construction operations entered into. If, however, the property desired can be rented from its owners, the lessee company comes immediately into the possession of a completed property, manned by an operating organization and on a profitable basis. The same result, from the standpoint of control, may be reached by purchase of the stock of the company owning the desired property, which can be pledged under an issue of collateral trust bonds. This method has already been explained. Here, however, the question of financing arises,

the bonds must be sold, or a sufficient sale must be insured by a syndicate to purchase the amount of stock desired. The purchase of stock control, moreover, may require the entire issue of the company which owns the desired property, and the financing may be extensive. To acquire control by the method of lease, however, involves no more than dealing with the board of directors, and the submission by them of a proposition to the stockholders, for approval by the percentage of stock fixed by law in the charter. If the offer is advantageous, and with the prestige of the directors behind it, it is likely to be accepted without serious opposition.

Disadvantages of Lease from Standpoint of New Capital Provisions

Leased property has objections from the point of view of the lessee. It is not available as security for loans to pay for improvements which may increase its value. While the property of a street railway system is in the hands of the lessee company, and while its operation is controlled by the lessee, title to the property remains in the lessor. In the natural course of improvement, with a steady growth of population, large extensions and additions, and a large amount of reconstruction of the property, are certain. The progress of invention has completely revolutionized the methods and mechanism of street railway corporations. The motive power, types of cars, the methods of generating power, and the types of track, have been greatly improved. The cost of all these improvements and extensions which are made upon the property of the lessor, in the absence of special provisions in the lease, must be borne by the lessee company. With a short term lease, the improvement of the lessor's property may be the ground for a successful demand for higher rental from the lessee, and improvements are likely to be deferred or abandoned on this account. With a long term lease, the only objection to improving

the lessor's property is the difficulty of financing the cost of these improvements. In such cases, the only property right held by the lessee is the lessor's interest obtained by capitalizing the profits of the lease. This right may in some cases be very valuable. The method of financing on the basis of leasehold value has already been explained and illustrated in Chapter XXXV. Where the profits on a lease are not large enough to make the lessor's interest of great value, great difficulty may be experienced in financing improvements which are essential to the development of the system, and which may, in fact, be demanded by the public authorities.

Philadelphia Rapid Transit Company Shows Capital Difficulties of Lease

An illustration of the difficulty experienced by the lessee company under these circumstances was furnished by the Philadelphia Rapid Transit Company which holds under lease the street railway property of the Union Traction Company which preceded it in control of the street railway system of Philadelphia. In September, 1908, the Rapid Transit Company sent a letter to the shareholders of the Union Traction Company which is as follows:

On July 1, 1902, you turned over to this company your property on a rental basis. You had acquired this property seven years before, had expended your money in the development of it, and while in later years you had shown a surplus from operation, that surplus had not, up to that time, been sufficient to justify the payment of a dividend.

This company, by the terms of the lease, undertook to pay you a dividend from the start, equal to the largest earnings which you had shown up to that time, and increasing until they should reach, as they now have, double that amount. In the past six years we have spent approximately $20,000,000 in building the new elevated and subway railway and $20,000,000 upon improvements and extensions of the system which you turned over to us. This company has been subject to severe criticism for having assumed to pay a dividend upon the par value of your stock,

only thirty-five per cent of which has been paid in, but the answer is that we have (in effect) spent upon this system not only the 19½ millions remaining unpaid upon your capital stock but 10½ millions additional, with respect to which $30,000,000 no fixed charge has been assumed and no return has been paid.

The increased cost of operation, the recent depression in business and unavoidable delays in the completion of the subway have necessarily upset, to a certain extent, the calculations upon which the rental obligations were based. These conditions, however, have merely postponed the fulfillment of our expectations, and the management has full confidence in its ability to place the property upon a substantial paying basis, provided it is able to do the financing always necessary for a growing property.

Since we took over this property we have secured a contract with the city in which the Rapid Transit Company has given up valuable privileges for the purpose of securing to your company immunity from the threat of hostile legislation. This contract is of the very greatest benefit to the Union Traction Company and its underlying lines.

As already stated, nearly half of the $40,000,000 capital raised by this company has been expended directly upon the surface system. Several millions of dollars went to the building of what are practically new lines, although they have been built under extensions of your old charters.

The Rapid Transit Company has now made the final call upon its capital stock and this has been practically exhausted by the expenditures already detailed. It is now necessary to relay many miles of surface track and to add equipment of a more modern character calculated to serve the public better, and to collect a much greater percentage of the fares. These expenditures will be made directly upon your property, rendering the security of your lease that much better, both as to the value of the property and its earning power.

It appears from this letter that, unless the Rapid Transit Company could make use of the credit of the Union Traction Company, the financing of necessary improvements would be impossible. A proposition was, therefore, made to the stockholders of the Union Traction Company to permit the former to use a large number of valuable securities enumerated in the list and intrusted to the Rapid

Transit Company as collateral security for an issue of $5,000,000 of collateral trust bonds. The proposition was accepted by the Union Traction Company, and the funds provided. Evidently, however, the lessee company cannot always count upon the acquiescence of stockholders of lessor companies in placing encumbrances upon their property for the benefit of that property. In recent leases, provisions have been inserted whereby the lessor company is obliged, under certain conditions, to finance improvements upon its own property.

Foregoing Objections Removed by Boston Elevated Company

One of the most carefully drawn leases ever executed is that which gave to the Boston Elevated Railway Company the control of the West End Street Railway. The lease bound the Boston Elevated to pay 7 per cent per annum on the common and 8 per cent on the preferred stock directly to the stockholders without any reduction, the lease stating that these dividends were to be "net" amounts. The lease further explicitly provided that the Elevated Company should pay all damages to persons or property; all sums due for taxes—Federal, state, or municipal—upon the lessor's property, franchise, or capital stock; and all sums "by law required to be deducted from any amounts payable upon the lessor's stock." The lease, on the other hand, stipulated that all saving from refunding of the West End Company's bonds should accrue to the lessee, the Boston Elevated Company. The lessee also assumed definitely the interest on the bonds of the West End Company, and on the existing indebtedness of any street railway which the West End Company was under obligations to pay. It also assumed all liabilities under the contract with the city of Boston touching the subway.

The provisions in this lease regarding the right of the lessee to issue stock or bonds of the West End Company

for improvements, particularly deserve attention. The West End Company was required to issue stock or bonds, from time to time, at the request of the lessee, in order to meet the cost of improvements and additions to the lessor's property. The West End Company must be informed of the purposes for which it is proposed to issue the securities, and if it dissents from the expediency of the expenditure, and withholds its consent to the issue, a board of arbitrators must pass upon the matter. If the arbitrators, by a majority opinion, do not approve the same, the lessee cannot insist upon the issue being made. One arbitrator is to be chosen by each of the parties to the lease, and the third by the two so chosen, or by the State Board of Railroad Commissioners, or by the Chief Justice of the Supreme Court of Massachusetts. The lessee company has the right to decide whether the issue of security by the lessor shall be stock or bonds, and it may fix the rate of interest which the bonds shall bear, but it is provided that "no bond shall be issued in excess of the outstanding capital stock" of the lessor. Provision must, of course, be made, in case bonds are issued by the lessor for the improvement of leased property, for an increase in the rental to provide for interest and sinking fund on the new bonds.

In order to protect the lessor company against improper use of its credit by the lessee, there is set down in detail in the lease the expenditures which the lessee can capitalize for the account of the West End Street Railway. These are especially limited to the following permanent additions and improvements:

1. The abolition of grade crossings.
2. Additional rolling stock and equipment.
3. Additional track mileage and its equipment.
4. Additional real estate.
5. Additional stations, power, and car houses.
6. Additional buildings, bridges, and other structures.

7. Renewals of, or substitutes for, stations, bridges, buildings and other structures, track, and equipment, "so far as the cost of such renewals and substitutes exceeds the cost, when new, of the things received or the things replaced."

Lessee Corporation in Assuming Debt May Take Over Bond Reserves

The provision just described is now often included in leases of properties where it is necessary to provide for capital expenditures. Another method sometimes employed, and which a proper organization of the capital account makes possible, is for the lessee, when it takes over the property of the lessor and assumes the obligation to pay interest on its bonds, to take over also any unissued bonds authorized under existing mortgages, and to issue these at will, subject to the restrictions of the mortgage. This method is preferable to that employed in the Boston lease which is apt to lead to endless discussions and bickering over the propriety of particular expenditures. If the restrictions in the mortgage are carefully drawn, the lessee can, without danger to the lessor's property, and in fact with great benefit to the lessor, freely employ the credit arranged for in the mortgage for the benefit of the lessor's property. In this manner provision can be made for the expansion of the business carried on by the use of the leased property.

CHAPTER XLII

THE HOLDING COMPANY

The holding company is a corporation organized for the purpose of acquiring the stocks and other securities of other corporations. These securities are acquired either by direct exchange of its own stocks and bonds, or by their sale for cash which is used to purchase the securities desired. The ownership of the stocks of various companies gives to the holding company the right to elect their boards of directors and to dominate their policy, thus accomplishing a combination between them which is as perfect, aside from the infrequent interference by an unrepresented minority, and the cost of maintaining the corporate organization of the constituent companies, as though the different corporations had merged their existence in that of the company which has acquired a controlling interest in their stocks.

Reasons for Use of Holding Companies

Holding companies are formed both for legal and financial reasons. The primary purpose of forming a holding company is to effect a combination of allied enterprises which cannot be accomplished by the use of any one of the corporations which it is intended to include. If corporations are organized under the laws of different states, there is no method by which they can be directly consolidated. Important considerations of financial expediency favor the use of this device when it is desired to bring under single control within a short time a number of properties in the same line of business. When it

is desired to form a combination, for example, of a number of steel manufacturing concerns, one of the operating companies can be used as a holding company, or a new company can be formed. Even if no legal obstacles intervened, however, the holding company will be the device usually selected.

The situation as regards consolidations may be summarized as follows:

The purpose of a holding company is the combination of allied and often competing enterprises. Such a combination could be effected by any one person or group of persons with sufficient capital. It could be effected by the purchase outright of the various properties or business. Practically, however, many combinations would never be brought about except for the holding company. Practically all of the great consolidations of twenty to thirty years ago, such as the United States Steel Company, the National Lead Company, and the International Harvester Company, have been holding companies. It would have been impossible for the United States Steel Corporation to have been formed in any other way. It is necessary in the getting together of such a group of properties to act quickly and at a favorable time. It is necessary to get along with the minimum amount of cash. The amount of cash necessary to buy the properties consolidated into the United States Steel Corporation would have been impracticable to raise. It is necessary, further, as much as possible, to retain the interest of a large number of stockholders in the older companies in the new consolidated company. It is necessary to provide a practical working method of bringing them all together, and particularly necessary to provide for the contingency that it may be impossible or impracticable actually to sell the property of one of these corporations to the Consolidated Company, or it may be impossible to get the consent of certain of those interested in the selling company to the Consolidation.

The stockholders act naturally like a flock of sheep. In the main, they follow the lead of the directors, and if the details of carrying the plan through are so arranged that the stock in the new company has an apparent money value greater than the stock of the old company for which it is offered, the exchange once started takes place generally, and when a majority of the stock in the companies is exchanged practically the consolidation is effected. The difficulty in bringing enterprises together in any

other way can be realized when you appreciate that in many states it is impossible for a corporation, even a private manufacturing corporation, to sell out its entire property, including franchises and good-will. It has been held in some jurisdictions that such a sale is foreign to the whole purpose for which the corporation was formed and that when the time for such a sale comes, it means the dissolution of the corporation and a final disposition of its assets among its stockholders. There is further in certain states the absolute prohibition for a corporation of greater than a limited amount of capital to do business in the state. This alone would prevent the amalgamation of a number of properties into one great corporation directly owning all the properties.[1]

Another reason for choosing the holding company for the consolidation is that to employ an operating company as the purchaser of the stocks of other corporations would require a large increase in the stock of this company, and this increase might, under the laws of the state or the charter of the corporation, require the consent of three-fourths or even a larger proportion of the stock. Stockholders of the proposed holding company might object to this reorganization of the capital account for a purpose of which they might not approve, and the combination might be halted at its outset by embarrassing litigation resulting from the efforts of minority stockholders to protect their rights—whatever the motives back of the litigation.

The Holding Company as a Finance Company

A holding company has various other uses in addition to that of accomplishing a combination. It is largely employed as a finance company. One of the best illustrations of holding companies organized for this purpose is furnished by the corporations manufacturing electrical apparatus and appliances. The products of the General Electric Company, for example, are purchased by corporations en-

[1]Condensed from one of the first group of lectures on Finance in the Harvard Graduate School of Business Administration, delivered by Robert Herrick.

gaged in the operation of electric railroads, power, and lighting companies. When these companies are started, their promoters usually welcome assistance in providing the funds for construction. They are willing not merely to make liberal arrangements in the way of stock bonuses, but also to give to the construction companies affiliated with the banking or financial concerns which give them assistance in putting through their project, exclusive contracts, not merely for construction, but also for all materials and appliances which may be needed, for a long time to come, in the maintenance and extension of the plant.

The companies manufacturing electrical appliances, therefore, placed themselves in a position to render financial assistance to new companies in order to secure a market for their machinery. The General Electric Company owned the entire capital stocks of the Electrical Securities Corporation and the Electric Bond & Share Company. Both of these companies were finance companies; they took part in the underwriting of securities of electric companies of various kinds, and also purchased the bonds of such companies, sometimes taking with the bonds a bonus of stock.

They obtained the funds for these purchases, not merely because of the high credit which the backing of the General Electric Company gave them, but, also, by the sale of their own bonds secured by the stocks and bonds which they purchased. When a favorable opportunity occurred, the collateral supporting these bonds was withdrawn and sold, a corresponding amount of the collateral trust bonds being paid off. In other cases, the substitution of collateral, according to the method already explained in the discussion of the collateral trust bond, is permitted.

By pledging the bonds which it purchases as collateral for loans, a corporation of this character is able to free its capital for new employment without selling unseasoned bonds which have no established earning power, at the low

prices which such securities bring. The bonds can be put away under the collateral trust mortgage until the companies issuing them have reached an assured position, when they can be sold at a substantial advance over the price paid. Bonds purchased by such corporations, moreover, often carry a bonus of stock, and the stock can either be held for dividends or sold as soon as it reaches a proper figure.

The original object of the Electrical Securities Corporation and the Bond & Share Company was to assist the owner of their stock—the General Electric Company—in pushing its business. It was not their object to retain permanently the bonds which they purchased. As fast as these showed a substantial profit, they were sold and the proceeds reinvested in other securities.

Recent History of the Electric Bond & Share Company

The Electric Bond & Share Company was separated from the General Electric Company in 1927 by the distribution of its stock held in the General Electric Company treasury, to General Electric stockholders. Since that time, it has gone more extensively into the purchase of public utility securities, especially in Latin America, and more recently in China, through its control of the American & Foreign Power Company which recently raised $100,827,000 of new capital for the purpose of making additional purchases. The peculiar advantage of such holdings lies in the fact that rates and prices of utility corporations are not regulated as in the United States. The chief concern is to obtain service. The Electric Bond & Share Company is still working in close harmony with the General Electric Company, but it has expanded into a finance holding company on a large scale. In addition to the American & Foreign Power Company which it controls, it has large holdings in the American Power & Light, the Electric Power & Light, and minority interests in the American Gas & Elec-

tric, and Electric Investors, Incorporated. For all these groups of companies, as already explained in the discussion of horizontal consolidation, the Electric Bond & Share Company performs general management service including operation, financing, engineering, accounting rates and policy services. For these services it charges fees, which, it is reasonable to suppose, represent in the aggregate a large income. The company has now grown into a vast enterprise with $694,472,000 of assets at the date of the last report, and with a surplus of $708,619,492. The company still continues its security operations, buying and selling utility securities as before, which it does not consider as permanent investments as it considers the five companies above mentioned. The close affiliation with the General Electric company still continues, since the stockholders are still largely the same persons.

Financing Subsidiary Companies

The method of financing companies controlled by a holding company varies with the size and credit of the subsidiaries. If the subsidiary is large and its securities are well known, it handles its own financing. When the controlled company is small, the parent company makes advances to the subsidiary, taking securities in exchange, which are held in its treasury and used when need arises as a basis for collateral trust issues. Only the largest operating companies, such as the Detroit Edison, controlled by the North American Company, can raise money on as favorable terms as can the large holding companies.

In the difference between the cost of the money to the parent company and what they charge the subsidiaries, they find another opportunity for profit. There is nothing unfair in this, as long as they lend money to their subsidiaries at lower rates than the subsidiaries could borrow for themselves. A higher rate would, of course, be a ground

for criticism, and possible interference by the public authorities. It is not unreasonable to suppose that, so far as is legitimate and proper, of which the holding company officials are the judges, the affairs of the subsidiary companies are conducted with a view to the profit of the holding company.

The Railroad Holding Company and the Interstate Commerce Commission

An interesting development of the holding company in the field of railroad securities is its use to escape the control over security issues, especially in connection with consolidations, which the Transportation Act of 1920 gave to the Interstate Commerce Commission. The Commission has been very critical of the consolidation plans submitted. No plan of major importance has been approved. The Commission has relied upon the fact that consolidations cannot be financed without security issues and that such issues must have their approval. The Commission's jurisdiction, however, does not extend to holding companies, and such large scale consolidation as has been done has been put through holding companies, thus evading the Commission's control. For example, when the Pennsylvania Railroad Company wished to finance its purchase from the Delaware & Hudson of that company's holdings of the Wabash and the Lehigh Valley, it did this through the Pennsylvania Company, a holding company, all of whose stock is owned by the Pennsylvania Railroad Company. The Pennsylvania Company took over, from its owner, the stocks in question and issued its collateral trust bonds, secured by the stocks purchased. The Interstate Commerce Commission was not consulted and had no ground to interfere, although it has since attempted, on other grounds—the alleged violation of the Clayton Act—to force the Pennsylvania Railroad Company to divest itself of control of these stocks.

The Pyramidal Holding Company

To erect a pyramid of earnings by following the method long in use is to convert dividend paying common stock of an operating company, issued by another company which takes over control, and whose earnings are increasing, into fixed return bonds or preferred stock. The original holders of the stock profit by this exchange in that they receive something whose return is fixed in a contract and not to be changed by the decision of directors. When the purchasing company is strong in earnings, which is usually the case in the public utility field, and since this strong company has placed bonds or preferred, or A stock issued to purchase the common stock of the operating company, ahead of its own common stock, there is no reason to doubt that interest or preferred dividends on the securities issued in the transaction will continue to be paid. How can the purchasing company, the first holding company which starts to build the pyramid, make any money out of taking over a group of operating companies on a basis such as described? We have already shown some of the profits of such a relationship in management fees, engineering charges, and financing charges. Beyond this, there is the opportunity to profit by the increase in the earnings and dividends on the stock purchased.

Pyramiding by Means of the Lease

A method of accomplishing this result formerly in common use, extensively employed in the street railway consolidations of the period 1890–1910, was to organize a company, or use an existing company which would *lease* the desired line, paying as rental a fixed dividend on the stock. By such an arrangement, the return to the stockholders of the leased company, the landlord, was fixed, and all increases on earnings went to the tenant. When operating earnings move rapidly upward, as they did in the early days of electric traction in large cities, this process of leasing

was sometimes, as in Philadelphia, several times repeated. A group of operating companies would be leased for a fixed dividend on their stocks by another company, into which sufficient money would be paid as subscription to its stock to give some value to the tenants' obligation. The tenant would then operate these leased properties, and the rapid growth of earnings which at that time generally blessed street railways in large cities, quickly showed a large profit over the rental.

In a few years, conditions favoring, the operation would be repeated. Two or more of these leasing companies would in turn be taken over by a new company, which would guarantee a fixed dividend on this stock, and assume the burden of paying the rentals of the companies owning the street railway properties. From time to time, also, the tenant companies, out of their capital and earnings, would make improvements on these leased properties, all of which went to the company owning the property. They built new power houses, car barns, and purchased new equipment as the old equipment became obsolete. Finally, as in Philadelphia, the third lease-holding company, the Union Traction Company, was taken over by a third holding company, the Philadelphia Rapid Transit Company, as already explained in the chapter on the lease. The method was the same, a guarantee of 6 per cent dividend on the stock of the Union Traction Company, par $50, on which $17.50 per share had been paid, and the assumption by the Philadelphia Rapid Transit Company of all the lease obligation which had been successively assumed by the original leasing companies and the Union Traction Company. This operation is called pyramiding—and the result is a pyramidal leasing (holding) company.

These successive leases were very attractive to the stockholders of the companies which either owned or successively controlled the original properties and the additions thereto. Their stock was, by the terms of the leases, converted into

guaranteed stock, and they were freed from the risks and uncertainties of operation.

Pyramiding a Capitalization of Leasehold Profits

It will be noted that the basis of these successive stages in the consolidation is an increasing fund of earnings out of which the accumulation of a series of rentals or guaranteed dividends is paid, leaving a margin of earnings out of which dividends on the stock of each succeeding lessor is paid. If earnings cease to expand, the last company to assume the obligation of paying the accumulated charges of its predecessor companies in control of the property is not likely to be profitable. This has been true of certain street railway consolidations. The Philadelphia Rapid Transit Company, for example, was launched in 1902 and paid no dividends until 1916, although the companies which preceded it were very profitable until taken over.

The lease has gone out of fashion in forming these consolidations. In recent years, first bonds, and later preferred or A stock have been employed. The underlying method is, however, the same, to exchange a senior, fixed return security for a junior security, common or B stock, the purchasing company expecting that earnings will increase sufficiently to show a profit derived from increased dividends on the stock purchased, for its own stock, after paying interest or dividends on the securities issued in the exchange.

When common stock is purchased with common stock, there is no pyramiding, since the stockholders of the company purchased participate, pro rata to their proportion of the purchasing company's stock, in all increased dividends on the stock which they formerly owned. The underlying idea of the pyramid, to repeat, is to fix a return on the securities issued for stock purchased, so that the stock of the purchaser will gain the entire advantage of increased dividends on this stock. To the extent that the securities

given in exchange for stock in building the successive levels of the pyramid are participating with the junior stock of the purchasing company, the principle of pyramiding is departed from. The same qualification may be made when subscription warrants or conversion rights are given with the securities used to purchase common stock.

When the purchasing stock is made non-voting, even though participating in earnings with the common stock of the purchasing company, a pyramiding of control takes the place of a pyramiding of earnings. The stockholders of the controlled company are voluntarily disenfranchised, and have no voice in the election of directors of the company which now controls their former property.

In the public service field, especially in light and power consolidations, this method of the pyramidal holding company has been extensively employed.

Possible Danger to Utility Holding Companies

A consideration affecting the future prospects of these utility holding companies is the fact that the rates and prices of the operating companies, from which all the sustenance of holding companies is derived, are limited to a reasonable return upon a fair value of the operating property. Up to the present time, this point has not been generally raised. There has been no effective attempt at a general revision of rates for gas and electricity based on a comparison of utility earnings with utility values. With the rapid growth of these operating earnings realized from a combination of increasing business with more economical operations—the reduction in coal prices in recent years is a case in point—the legitimacy of present rates may be challenged on the ground that they produce excessive profits. A concerted and determined effort on the part of consumers, to force lower rates, might have serious consequences to the equity values on which these high pyramids of holding company values have been erected.

Even a downward revision of rates, however, which some utilities, such as the Brooklyn Edison, and the American Telephone & Telegraph, have already started on their own accounts, will not touch the management fees and financial margins from which the holding companies make large returns. Foreign companies, as we have seen, are beginning to figure in the assets of these holding companies, and these foreign investments are as yet comparatively free from regulation. The O'Fallon decision by the Supreme Court reestablishes the basis of cost of reproduction as an important element in valuation. The court has also established the principle that depreciation reserves accumulated out of past profits may be included in property valuation. The processes of downward rate regulation are long drawn out. No substantial public sentiment in its favor is yet visible, and public sentiment is unorganized.

CHAPTER XLIII

THE HOLDING COMPANY AS A DEVICE TO RESTRAIN TRADE

A development of the holding company which shows with great clearness how this financial device was used for a time to defeat the law is the growth of the industrial "trust," a movement which came to an end many years ago, but whose results still occasionally engage the attention of the courts.

The industrial trust movement began on a large scale at the close of the Spanish-American War. Its development furnishes a complete and interesting review of the possibilities of intercorporate relationship, as well as a convincing demonstration of the ultimate and overwhelming supremacy of the law.

Origin of the Trust Movement

Many attempts had been made before 1898 to lessen the recognized evils of competition. These attempts had usually taken the form of pools, many of which, especially in the iron and steel trades, were organized during the last industrial depression. A pool is a voluntary association of sellers who place the marketing of their product under some central control or general restriction. The primary object of such agreements is to secure profitable prices, either directly or by means of payments from a central treasury, to the members of the association. The methods by which these profitable prices have been secured are in general as follows: (1) the output of the mills included in the association is restricted, so that prices can be ad-

vanced by the limitation of supply; and (2) the buyer is held to the regular quotations, and is unable, by playing off one competitor against another, to obtain special concessions. The pool may go further than the regulation of prices and output; it may secure favorable terms on material purchased; it may deal as an association with railroads to obtain such concessions as are granted to large shippers, and it may assist its members in dealing with organized labor. As a general proposition, however, the purpose of a pool is to regulate production and control prices, leaving the details of management to the separate companies.

The Pool

The pool is usually organized with a central governing or advisory body which conducts all routine business and receives and distributes the funds of the organization. A matter of such importance as a change in prices would generally be decided at a meeting of all the members of the association, or by some executive committee composed of the larger manufacturers. Within these lines, the pool has assumed a variety of forms.

The Bessemer Steel Pool, which was organized in 1896, furnishes an illustration. This organization included the majority of the producers of crude steel and finished material in the Central West. Every mill was given a percentage allotment which it was allowed to sell—say, 500,000 tons, or one-seventh of the total estimated output of the association. At the end of each month the shipments from all the mills were reported to the officers of the pool. If any mill was found to have exceeded its percentage allotment, it was required to pay into the pool treasury $2 per ton of such excess, while an equivalent was paid out of the treasury to those who did not ship their allotment. For example, if the mill which was allotted 500,000 tons sold 700,000 tons, while the sales of another mill fell 200,000 tons short of its allotment, it would receive out of the pool

treasury the amount which Mill No. 1 would pay in—*viz.*, $400,000. The existence of this penalty operated to prevent price cutting among the members of the pool. In the Wire Nail Association, which held control of the nail market during 1895 and 1896, the central office fixed prices and assigned to each producer his share of the output, which it was believed could be marketed at the price agreed upon. It often happened in the management of a pool that the output of the association would be produced by a few of the best-equipped or best-situated plants, the owners of the idle plants being paid a certain rental to keep out of business.

Weakness of the Pool

The essential weakness of this form of organization is its inability to enforce its agreements. The necessity of voluntary assent on the part of every member of the association, the liberty of each to withdraw on short notice, and the difficulty of establishing relations of mutual confidence among competitors, all unite to emphasize this defect. The members of a pool have long since formed the habit of closely scrutinizing the moves of those in the same business; and even a small misunderstanding often creates a feeling of mutual distrust and apprehension which work the destruction of harmony and the final dissolution of the organization.

The successful management of a pool was peculiarly difficult during a period of business depression, when business at remunerative prices was hard to get. Strong producers at such a time were suspected of attempts to obtain more than their allotted share of orders by methods which are contrary to the spirit, if not the letter, of the pool agreement. For example, the Bessemer Steel Pool, above referred to, originally applied only to the tonnage of steel billets, ingots, bars, or slabs. The steel which was rolled into merchantable shapes did not count in the allotment.

Some of the large producers took advantage of this fact to market as much as possible of their output in the form of finished material, by this method of indirection far exceeding the limits of their allotment, and they could not be penalized for so doing. Such offenses against the pool agreements made their permanent continuance impossible.

The following quotation from the *Iron Age* of December 10, 1896, shows the usual fate of these associations and the results which follow their dissolution:

> The Billet Pool, or Bessemer Steel Association of the United States . . . is now in session. . . . The meeting promises to be a stormy one, as there is considerable ill feeling against certain concerns who are charged with having violated the pool agreement. The pool was practically dissolved as soon as the resignation of the Bellaire Steel Company was in the hands of the secretary. There has been an open market on Billets, Sheet and Tin-plate Bars since Saturday morning, and a scramble for business on the part of some mills. Probably 25,000 tons of Sheet Bars have been sold this week at very low prices, the deliveries running up to the close of 1897. There have also been considerable sales of Billets and Tin-plate Bars at low prices.

The prices which followed the dissolution of a pool, when confidence had been destroyed, and when manufacturers were making concessions to secure business, were often even lower than the low prices which had brought the producers together. Before the dissolution of a rail pool, in February, 1897, the price of steel rails at Chicago was $27.50 per ton. Owing to the dissatisfaction of the Lackawanna Iron & Steel Company with its allotment of 17 per cent of the total output, and its consequent withdrawal from the association; and owing to the demand of the Illinois Steel Company for all territory west of Pittsburgh, the pool was disrupted. Steel rails were immediately offered by the Carnegie Company for delivery at Chicago at $17 per ton, a reduction of $10.50 from the pool price. In 1895, for six months before the organization of this pool, the price of rails averaged $21 per ton. After the dissolution of the

pool, the price did not again reach this figure until January, 1899. The breakdowns of pooling agreements in the steel trade during the period 1892–98 occurred with such periodical regularity that large buyers were accustomed to wait for the dissolution before making their purchases. After the break in the rail pool in February, 1897, the eastern sales resulting from the reduction in price amounted to 200,000 tons. The Illinois Steel Company in the West booked orders amounting to $5,000,000. The railroads hastened to load up the rail mills with large orders, often for delivery eighteen months in the future.

Not only were the pool agreements unstable, but their regulation of prices was frequently very foolish. The determination of the policy of a pool was, in most cases, a question of majority rule, and the majority of producers in any trade are unlikely to be possessed of a broad grasp of business situations, or to be able to see further than the immediate future. When they found themselves in control of the supply, the various associations frequently raised prices to figures which seriously interfered with demand and which stimulated immediate and general competition. The policy of the nail pool above referred to offers a good illustration of this tendency to extortion. In the face of a general decline in prices, and a severe depression affecting every important industry, the price of a keg of wire nails was increased from 87 cents to $2.55—a rise of almost 200 per cent, and this high price was maintained for six months.

The *Iron Age* characterized this policy as follows:

> Looking at the matter even from the manufacturer's standpoint, it would seem the part of wisdom to have put the price of nails at a reasonable figure rather than attempt to maintain a price which in the very nature of things must be temporary, and may, perhaps, end in disaster. Only those in close touch with the trade are aware of the influence which the policy of the association has in encouraging the establishment of new plants, whose competition must be troublesome, while at the same time

it invites the importation of foreign nails. . . . The trade are aware that the present price of nails is abnormally high as a result of agreement between the manufacturers—so high, in fact, that it is constantly under suspicion. The trade will doubtless continue to limit their purchases to their imperative requirements so long as nails are held at their present figures.

Pooling agreements among manufacturing competitors were inherently defective. They had no firm basis in mutual confidence. They usually resulted in such an unreasonable increase of prices as to check consumption and stimulate competition. In few cases were they productive of more than a temporary advantage in profits to their members.

The Use of a Board of Trustees to Accomplish a Combination in Restraint of Trade

The "trust" movement of the eighties promised a more satisfactory restriction of competition. In this form of organization, agreement among manufacturers as to prices and output was secured by depositing the stocks of the constituent companies with trustees in exchange for trust certificates. These entitled the holders to such dividends as might be declared on the stocks, and also empowered them to vote for the trustees in the same manner as the stockholders of a corporation elect their directors. The trust certificates, moreover, could be dealt in on the stock exchanges in the same way as the certificates issued by the voting trust of a corporation. The trustees, being in control of the stock of the several corporations included in the trust, directed the management of these companies, and secured a uniform policy upon prices and output. Permanence of control was secured by making the transfer of stock to the trustees, except by the formal dissolution of the trust—as provided for in the articles of association —irrevocable.

The trust, so far as it included former competitors, fur-

nished a more satisfactory restriction of competition than the pool. It was open to fewer objections; its organization was permanent; its government was centralized, responsible, and representative. The control of the constituent corporations by the central organization—the trustees—was complete, for the trustees elected the board of directors of each of the constituent companies. Because it was permanent and centralized, the trust pursued a more enlightened policy as to prices than the pool. The Standard Oil Trust made a considerable reduction in the price of refined petroleum, and the Sugar Trust, although for some years in practical control of the market, did no more than to restore prices to a living basis. The Whisky Trust attempted to charge excessive prices, but the complete failure of its attempt, owing to the growth of competition, justified the wisdom of the more conservatively managed organizations. The Cotton Oil, Linseed Oil, and Lead Trusts showed no disposition to practice extortion upon the consumers of these products. The trust, as a device for the control of competition, was satisfactory. Its legal position, however, was inherently defective.

Anti-Monopoly Laws

Beginning with the Granger agitation against the railroads in 1870, there had grown up throughout the United States a pronounced sentiment against monopoly, understanding by monopoly any attempt on the part of a railroad or manufacturing corporation to increase rates or prices by reason of its control of a particular market. The laws of most of the states forbid monopoly. Many state constitutions contain similar provisions. In 1890, sixteen states, either in their constitutions or by statute, prohibited any combination in restraint of trade; and the common law, which was generally applicable throughout the states, also forbade any combination of this nature. The anti-trust law of Missouri, for example, prohibited any "pool,

trust, agreement, combination, confederation, or understanding with any other corporation, partnership, individual, or any other person or association of persons, to regulate or fix the price of any article of manufacture." In 1890, Congress passed the Sherman Anti-Trust Act, which declared that "every contract, combination in the form of trust, or otherwise, or conspiracy in restraint of trade or commerce among the several states or with foreign nations, is hereby declared to be illegal." This legislation was backed up by a vigilant public opinion rancorously hostile to large corporations. It was not to be expected that the trusts would long survive in such an unfriendly atmosphere.

The pool was also specifically designated by most of these statutes as an unlawful combination, but the pool was a secret agreement whose details were not a matter of record and against which it was difficult to secure evidence. The Addystone Pipe & Tube Company is the most conspicuous case of the dissolution of a pool by legal process, and here the evidence against the organization was only secured through information given by a disaffected stenographer. That such pools existed was common knowledge, but to obtain conclusive evidence was difficult.

Trust Agreements Plainly Unlawful

The trust, however, which was a permanent pool, and which was expected to realize the benefits of the pool while avoiding its mistakes, lay open to attack. The trust agreements were matters of record. Their organizations were made under the usual legal forms, and the details of these organizations could not be concealed. The trustees could not refuse to disclose their authority for issuing the trust certificates which were dealt in on the exchanges. Any stockholder could enforce his right to examine the constitution and working of the trust which held his property. Neither could the fact be concealed that these corporations,

whose identity and active life had been preserved, were, under the trust agreement, no longer masters of their own actions. They had surrendered their delegated powers to the trustees. A perfect "combination in restraint of trade" had been effected, and in view of the manifold statutes prohibiting these self-evident combinations, the dissolution of such combinations waited only for an attack upon their right to exist.

The attack came in 1890, when the Attorney-General of New York brought suit against the North River Sugar Refining Company under the common law. The case was decided against the company, not only on the ground as stated in the opinion of the Circuit Court, that the North River Sugar Refining Company was a combination . . . "the tendency of which is to prevent competition in its broad and general sense and to control, and thus at will enhance prices to the detriment of the public, . . . but because the corporation, entering the trust, had exceeded the powers of its charter. The defendant had disabled itself from exercising its functions and employing its franchise as it was intended it should by the act under which it was incorporated, and had, by the action which was taken, placed itself in complete subordination to another and different organization to be used for an unlawful purpose, detrimental and injurious to the public. This was a subversion of the object for which the company was created, and it authorized the Attorney-General to maintain and prosecute this action to vacate and annul its charter." The Standard Oil Trust was also declared illegal on similar grounds by the Supreme Court of Ohio in 1892.

The result of these suits showed that even without the new menace of the Federal Anti-Trust Law, the legal position of the trust had become impossible. The states had prohibited all combinations in restraint of trade. The corporation is the creation of the state, and the state can

revoke the powers which it has granted when these powers are exceeded or unlawfully exercised. Certain corporations had combined into trusts in order to limit competition —*e.g.*, to restrain trade. These corporations had exceeded their powers, they had violated the laws of the states which had created them, and their charters were therefore forfeited. Unless some new device could be discovered by which the hardships of competition could be alleviated, the pool whose existence, though illegal, could be partially concealed, and which was ordinarily safe from legal attack, whenever regulation was required, must still be employed. Its defects were generally admitted, and it often aggravated the very evils which it was designed to cure; but if the trust was to be forbidden, the pool seemed to be the only form of combination possible.

Conversion of the "Trust" into the Holding Company

In 1892, the Standard Oil Trust solved the problem presented by the illegality of the trust agreements by the application of the principle of community of interest to the management of its various constituent companies. This trust was dissolved, and the stock was returned to the holders of the trust certificates, which were then canceled. A majority of the stock of each company, however, was retained by nine men who had been prominent in the affairs of the trust, and unanimity of action was in this way secured. Such an arrangement is always open to objection. It depends for its success upon the maintenance of harmony among the members of a group of individuals, and upon the strength of the ties of self-interest supplemented by the bonds of friendly association and personal regard. The control of the various Standard Oil companies was held by the members of a single family and their close personal associates. These men had long been identified with a single interest, and the feuds of the competitive struggle had not divided them. The principle of

community of interest proved to be, in this case, a working substitute for permanent organization.

Generally speaking, however, mutual self-interest backed by the friendship of members of a group of business men, is a precarious foundation for stability of prices or rates. Self-interest may lead men one day together and the next day it may lead them apart, and when the paths of self-interest diverge, friendship is usually powerless to prevent a break. Yet the threatened catastrophe of renewed competition among the members of the trust must be prevented, not only to secure the advance toward stability of prices, which had already been made, but to furnish similar solutions for other vexing problems of competition.

Revision of the Corporation Law of New Jersey

Before 1889, when the corporation law of New Jersey was revised, the laws of no state authorized the chartering of a corporation for the general purpose of owning the stocks or property of other corporations. Consolidation of corporations was more generally permitted, but the purchase of stocks of other corporations by a holding company was not considered to fall within the field of corporate privilege. There were but few exceptions to the general rule that a corporation should be organized for a specific purpose or for closely allied purposes. Pennsylvania had gone so far as to prohibit incorporation for more than one purpose.

In 1889, New Jersey revised its corporation act to permit corporations organized thereunder to acquire securities issued by corporations of other states and also as New Jersey Corporations to transact business in other states. Under this law, following the decisions against the American Sugar Refining Company in New York in 1890 and the Standard Oil Company in Ohio in 1892, the trusts proceeded to reorganize as New Jersey Holding Companies. The same control over the policies and actions of the con-

stituent companies which had, under the "trust" form of organization, been exercised by the trustees was now transferred to the directors of the holding company.

Methods of Accomplishing Conversion of the Trust into the Holding Company

The changes in organization were as follows:

1. To substitute for the certificates of the trust the shares of the new corporation, which were issued in exchange for the trust certificates.

2. To substitute for a board of trustees elected by the holders of trust certificates, a board of directors elected by the stockholders of the New Jersey holding company.

The assets of this New Jersey corporation consisted of the stocks and bonds of other corporations, each of these subsidiary companies being in full possession of its corporate faculties and exercising all of its lawful activities.

The difference between the old-time trust and the trust as we know it today, and the nature of the change in combination-organization which has taken place, may be illustrated by the table on the following page, which shows the metamorphosis of the Sugar Trust in 1891.

For all practical purposes, the two organizations are identical. Under the "trust" the control of each company was vested in a board of trustees, who issued trust certificates against the shares which they held. Under the "holding company" the control of each company was located in the company which held its stock, not as trustee, but as owner. In place of a board of trustees came a board of directors; in place of a distribution of dividends collected by trustees to holders of trust certificates, a distribution of dividends received by the holding company as declared by the subsidiaries to the holders of its own stocks. The parallel is almost exact.

The desired result of restricting competition by a permanent organization appeared now to be accomplished. It

STOCK OF CONSTITUENT COMPANIES IN HANDS OF TRUSTEES—TRUST CERTIFICATES OUTSTANDING

THE AMERICAN SUGAR REFINING COMPANY

	CAPITAL STOCK	CAPITAL ASSETS
1. The Havemeyer & Elder Sugar Refining Co.....	$500,000	$500,000
2. The Dick & Meyer Co....	200,000	200,000
3. The DeCastro & Donner Sugar Refining Co.....	350,000	350,000
4. The Moller & Sierck Co...	210,000	210,000
5. The Oxnard Brothers Co..	100,000	100,000
6. The F. O. Matthiessen & Wirchers Sugar Refining Co.....	400,000	400,000
7. The Brooklyn Sugar Refining Co.....	300,000	300,000
8. The Havemeyer Sugar Refining Co.....	1,000,000	1,000,000
9. The Forest City Sugar Refining Co.....	300,000	300,000
10. The Boston Sugar Refining Co.....	650,000	650,000
11. The Standard Sugar Refining Co.....	1,000,000	1,000,000
12. The Bay State Sugar Refining Co.....	225,000	225,000
13. The St. Louis Sugar Refining Co.....	755,000	755,000
14. The Louisiana Sugar Refining Co.....	450,000	450,000
15. The Planters' Sugar Refining Co.....	250,000	250,000
	$6,690,000	$6,690,000
	Valuation	$50,000,000

is true that the state authorities could, as Missouri did, expel domestic corporations on the ground that by allowing their stocks to pass into the possession of the Standard Oil Company of New Jersey they had disabled themselves from obeying the anti-combination laws of their state. Of such interference, however, the New Jersey holding companies were not afraid. The field was vast and the difficulty of arousing state authorities to action was great.

The Sherman Anti-Trust Law

A more serious menace was the Federal Anti-Trust Law, passed in 1890, known as the Sherman Law. The important sections of this statute are as follows:

Section 1. Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal.

Every person who shall make any such contract or engage in any such combination or conspiracy, shall be deemed guilty of a misdemeanor, and on conviction thereof, shall be punished by fine not exceeding five thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court.

Section 2. Every person who shall monopolize, or attempt to monopolize or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding five thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court.

The E. C. Knight Case

The law, however, was quickly declared inoperative against the New Jersey holding companies by a decision of the Supreme Court in the case of the United States *v.* the E. C. Knight Company. The American Sugar Refining Company had purchased four refineries located in Phila-

delphia, and suit was brought by the Department of Justice to enjoin one of the purchases on the ground that it was a violation of the Sherman Law. The court, though by a divided vote, held that the combination, assuming that its purchase resulted in forming a combination, related primarily to manufacturing, that any commerce resulting from manufacturing was merely incidental thereto, and that Congress had no authority under the Commerce Clause of the Constitution, over any transaction which did not primarily relate to interstate commerce.

Rapid Growth of the Trust Movement

Freed by this decision from apprehension as to the legality of their course, promoters and bankers in 1898 launched the trust movement which within five years brought under the control of New Jersey holding companies large sections of the principal manufacturing industries of the country. Coal, heavy iron and steel, lumber, railway equipment, liquor, woolens, crackers and biscuits, smelting, harvesting machinery, corn products, rubber goods, explosives, ship building, tobacco, in addition to oil and sugar, to mention only the most important of the industries whose ownership was in large part consolidated under the New Jersey Corporation Act, were all brought under the control of holding companies. In each case the method was the same, the exchange of stock or bonds of a holding company for the stocks of companies which it was desired to unite.

In 1901 the movement spread to the railroads. In order to compose the differences arising out of the contest for control of the Northern Pacific Railroad Company, the Northern Securities Company of New Jersey was formed to exchange its stock for the stock of the Great Northern and the Northern Pacific, parallel and competing lines of railway extending from Lake Superior to Puget Sound. Rumors were also current of a Southern Securities Company and a Southwestern Securities Company, while in the

eastern field the Pennsylvania Railroad Company had already acquired control of its principal competitors in the soft coal carrying trade, and the Reading Company in this same year, 1901, had purchased a controlling interest in the Central Railroad of New Jersey. The industries of the United States seemed to be rapidly drifting toward complete consolidation when the Department of Justice again intervened.

The Northern Securities Case

Attorney-General Knox, in February, 1902, filed a petition against the Northern Securities Company praying that it be enjoined from voting the stocks of the two railroad companies which it held, and also that it be enjoined from receiving dividends on these stocks. The claims of the government were: (1) that a controlling stock interest in these two parallel and competing railway systems was held by the Northern Securities Company, (2) that it was manifestly to the interest of this majority stockholder that competition should be suppressed between these companies, (3) that it should be presumed that this dominant voting power would be so exercised as to restrict and limit competition, and therefore, (4) that the stockholding body, which had the power and the incentive to violate the law, should be permanently enjoined from exercising those corporate functions of voting and receiving dividends through which the law might be violated, and the profits of violation might be obtained.

This argument which, in the writer's opinion, is the most forcible presentation of the case against the holding company as successor to the trust, was answered by the attorneys for the Northern Securities Company, in substance as follows:

The Northern Securities Company is an investor in railway stocks. It was formed not to restrain trade, but to promote trade. It claims the right of any individual investor, of any financial institution, of any trustee, to exercise all the rights inci-

dental to stock ownership. The Northern Securities Company exercises these rights by virtue of power conferred upon it by the State of New Jersey. Congress has no power under the Constitution to override the right of the States to charter corporations for lawful purposes, and the holding of securities is a lawful purpose.

In this case, it appears that the holding company as a device to override the laws against unlawful combination in restraint of trade, was on trial, and it is therefore surprising to find that the government won by a divided vote. The Supreme Court, by a bare majority, held that the Northern Securities Company, as then constituted, was a combination in restraint of trade, because its stockholdings in the Great Northern and Northern Pacific Railroad Companies gave it the power to restrain interstate commerce, and because it would be to its advantage to exercise such restraint by limiting the competition and increasing the profits of the companies which it controlled.

While this decision struck at the holding company as a device for defeating a Federal statute under the protection of a State law, it did not finally settle the question of the legality of a combination of manufacturing companies, which had been definitely taken out of the scope of the Federal power by the E. C. Knight decision in 1895.

The Oil and Tobacco Decisions

The suits against the Standard Oil Company and the American Tobacco Company, however, struck directly at the industrial combinations. The Circuit Court, in deciding against the American Tobacco Company, brushed aside the technicality of the Knight decision, assumed that a corporation controlling other corporations engaged in trade throughout the United States, was engaged in interstate commerce, and declared that

the Sherman Act must be construed as prohibiting any contract or combination whose direct effect is to prevent the free

play of competition and thus tend to deprive the country of the services of any number of independent dealers however small. . . . Two individuals who have been driving rival express wagons between villages in two contiguous states who enter into a combination to join forces and operate a single line, restrain an existing combination, and it would seem to make very little difference whether they make such combination more effective by forming a partnership or not.

The Circuit Court, with the best intentions, no doubt, attempted, in placing such a strained construction upon the language of the act, to draw off all its force and vitality.

The Supreme Court, however, by a vote of eight to one, Associate Justice Harlan dissenting on the ground that the decision narrowed the scope of the law, in declaring the Standard Oil Company of New Jersey an unlawful combination, laid down the principle that the Sherman Law does not prohibit every contract restraining trade, but merely those contracts and combinations which result in *undue* and harmful restraints of trade. Chief Justice White stated that the law made a comprehensive enumeration of *every contract, combination in the form of trust or otherwise, or conspiracy,* in order to make sure that no form of combination by which an *undue* restraint of interstate or foreign commerce might be effected, would escape the prohibitions of the Act.

To decide what are *undue* restraints of trade, the Court refers to the *standard of reason which had been applied* at the common law, and applies this *rule of reason* to determine whether a given combination is a violator of the Sherman Law. The Court further declared that the meaning of the Act is clarified by the second section which declares "the attempt to monopolize" as a crime punishable by fine and imprisonment. Monopoly, said the court, has three characteristics by which it may be recognized: (*a*) exclusion of others from entering the industry, by other methods than low prices and good service, (*b*) unduly advancing prices, (*c*) lowering the quality of the product.

In both the Oil and Tobacco cases the Court discovered abundant evidence that these companies had been organized "with an intent to monopolize" and that they were, therefore, unlawful and must be dissolved.

The application of the "rule of reason" removes the holding company, as such, from the prohibitions of the Sherman Act. If such companies attempt to establish monopolies, they may be dissolved, but the fact that they represent a combination of previously competing companies will not condemn them without proof of specific wrongdoing.

Later Proceedings under the Sherman Law

Since the Oil and Tobacco decisions a number of anti-trust suits have been decided, some criminal, against individuals, and others based on petitions for the dissolution of holding companies. Criminal juries are not inclined to convict for the crime of combination which, in the view of most men, is no crime at all. The government has, however, won a few cases where secret pooling agreements have been brought to light.

Civil proceedings have had better success. The Powder combination has been dissolved, a portion of the assets of the parent company being divided between two other companies in no way connected with the parent company. The International Harvester Company has transferred its foreign business to a separate corporation. The Corn Products Refining Company has also accepted a decree of dissolution. On the other hand, the government has been defeated in its attempt to dissolve the United Shoe Machinery Company, and also in its attack upon the United States Steel Corporation. The decision in the Steel Corporation case was, however, noteworthy in that, while allowing the corporation to continue, it declared that the practice of reaching informal agreements and understandings with its competitors by which prices were made uniform in certain

lines was unlawful. The Court pointed out certain errors of the corporation, without enforcing the extreme penalty. In this case the Court held that neither the existence of a monopoly nor of an attempt to monopolize had been proven. The legality of the United States Steel Corporation has been finally upheld by the Supreme Court on the ground that mere size, the implied power to do evil, is no sign of sin, especially since, for many years, the corporation had carefully refrained from practices which would indicate its intention either to extend its control or to exclude others from entering the industry.

A recent addition to the machinery of enforcing the anti-trust law and a strengthening of the law itself, was the passage in 1914 of two statutes, the first known as the Federal Trade Commission Law, which created a board of members known as the Federal Trade Commission, and the second as the Clayton Act.

The Federal Trade Commission

The Federal Trade Commission is in many respects similar to the Interstate Commerce Commission and is given like powers. Its duties are first, to investigate corporations engaged in interstate and foreign commerce, with the exception of banks and common carriers, to detect any violations of the statutes relating to commercial methods and practices, and its second function is to determine, after hearing on complaint filed by the commission, whether particular persons, partnerships, or corporations have violated any of the provisions of the laws relating to the matter placed under its care. The commission is also charged with the duty of issuing orders where violations of the law are discovered, and it can appeal to the courts to enforce these orders. All of the proceedings of the commission are subject to review by the courts, but its business is given precedence, and is to be expedited. The Trade Commission Law also established a new standard by which the legality

of certain practices can be determined, by declaring that unfair methods of competition in commerce are declared unlawful. It is for the courts finally to determine what these unfair methods are.

A list of recognized unfair practices follows:

1. Inducing breach of competitor's contracts either by lawful or unlawful means such as fraud, coercion or intimidation.
2. Enticing employees from the service of competitors.
3. Betrayal of trade secrets by employees.
4. Betrayal of confidential information by employees.
5. Appropriation of values created by a customer's expenditures (advertising) as when a name closely resembling that of the competitor is selected to appropriate the goodwill.
6. Defamation of competitors and disparagement of competitor's goods.
7. Intimidation of competitor's customers by threats of infringement.
8. Combinations to cut off a customer's supplies or to destroy his market.
9. Intimidation; obstruction and molestation of a competitor or his customers.
10. Exclusive dealing, including contracts to buy of one person; or to sell to one person exclusively; or to sell one person's goods exclusively; tying contracts, or contracts for exclusive agency or territory.
11. Bribery of employees.
12. Competing with purchaser after the sale of business and goodwill.
13. Passing off the goods of one manufacturer or dealer as those of another.
14. Conspiracies to injure competitors.

These offenses against the laws of fair dealing are self-explanatory. They summarize the rules which guide, in a general way, the practices of the Federal Trade Commission as they have for many years guided the action of the courts. They are a sort of codification of the rules of business warfare which have come down to us through the common law just as the prohibition against monopoly has descended from the sixteenth century. They are the rules

of fair play, the business code of a man of honor—a gentleman.

The Clayton Act

The Clayton Act goes much further than the Trade Commission Law in enumerating unlawful business practices. These practices are as follows:

1. Price discriminations where the object is to create a monopoly.
2. Tying contracts by which the sellers or lessors of goods attempt to prevent buyers or lessees from buying or leasing the goods of others, the object of the attempt being to create a monopoly.
3. Prohibition of the ownership of stocks in competing corporations by a third corporation unless the purpose is investment.
4. Prohibition of interlocking directorates in the holding of directors' positions in competing corporations by the same men, and especially the holding of positions as railway directors by bankers.

The Webb-Pomerene Act

American export trade is, by the provisions of the Webb-Pomerene Act, freed from the prohibitions of the Sherman Act. Export companies may be formed which unite all the principal producers in a line. Such combinations would be criminal in domestic trade. Such combinations are believed necessary to make headway against the strong competition encountered in the foreign field. Foreign nations have no prejudice against monopoly. Germany, for example, compels manufacturers to form monopolistic combinations, which keep up prices at home and reduce prices in the export trade. A large number of combinations, that of the Copper Export Association being the most conspicuous, have been formed under the provisions of this law.

CHAPTER XLIV

READJUSTMENT OF THE CAPITAL ACCOUNT

The capital account of a corporation has been described as a statement of assets and liabilities. From time to time, it becomes necessary or advantageous for a company to readjust its capital account, changing the form of assets, exchanging assets for liabilities, distributing assets or evidences of liabilities to stockholders, or changing the form of liabilities. The methods employed in making these readjustments can be grouped under the general title of readjustment of the capital account.

Reorganization of the capital account is usually required in the event of bankruptcy, if the business is to be continued. This form of reorganization will be considered in a later chapter. We are here concerned with the reorganization of the capital accounts of solvent companies.

Changing the Form of Assets

Reorganization may relate either to assets or liabilities. The first condition under which reorganization may be necessary is when it is desired to change the form of assets. The property of a corporation is constantly changing. A railroad company, for example, may wish to sell a part of its equipment which is no longer suited to its purposes, or certain real estate put out of use by the rearrangement of a terminal. Similar occasions are constantly arising when it is desirable for a corporation to dispose of certain of its property. When securities are owned, and when the control over the companies which have issued these securities is no longer important to the corporation which

owns them, opportunity sometimes arises to sell these securities, and to reinvest the proceeds, either in improvements or in other securities showing higher rates of return.

The Union Pacific

The testimony of Mr. E. H. Harriman before the Interstate Commerce Commission in its investigation of the alleged illegal combination between the Pacific companies in 1907, explained a transaction of this character as follows:

> We had, as the result of the Northern Pacific purchase, $82,000,000 of Northern Securities stock, at a cost of about $79,000,000. Then we were forced by the decision of the Supreme Court to take Great Northern, which we did not want, and a lesser amount of Northern Pacific than we had deposited with the Northern Securities Company. At the time the Great Northern and Northern Pacific was forced upon us, it had a market value of about $100,000,000.
>
> . . . Instead of disposing of it at that time, we held it until the market price increased in value to somewhere near $145,000,000 to $150,000,000. We sold some of it gradually as it went up, but at that value the returns from the Northern Pacific and Great Northern were less than three per cent on the stock that we held. Therefore we concluded that it was better to sell those stocks and invest the same money in other securities that would give us greater returns. So that, following out that line, we have sold enough of those stocks to realize $116,000,000.

Mr. Harriman further stated that the income from the securities purchased was approximately $5,500,000, instead of $3,250,000 on the Great Northern and Northern Pacific stock.

Reduction of Working Capital to Pay Current Debt

The working capital of a company, its cash, materials, and bills receivable, varies with the volume of its business. It is offset, in part, by current liabilities. With a falling off in business, a part of this working capital becomes unnecessary. It may then be employed to pay off the current debts of the company.

Sale of Property to Meet Debt

In some cases a corporation may be unable to meet short term indebtedness at maturity, and may be obliged to sacrifice some of its property to take up its loans. The Colorado Fuel & Iron Company, in 1903, "found it necessary, in order to meet its obligations under contracts previously made, and for the extensive work of construction and betterments upon which the company entered a year or two ago, and also for its general corporate purposes, to raise money from persons interested either as stockholders or directors, or both, by means of loans and sales (the sales, however, being subject to a contract permitting repurchase by the Fuel Company within a specified time)." This property was afterwards repurchased by the corporation at an advance in price, the stockholders being allowed to participate in the profits of the repurchase.

Conversion of Real Estate into Liquid Capital

Another more recent illustration of the advantages of selling real estate holdings is the sale by the Kresge Department Stores, Inc., of its real estate holdings to the Kresge Foundation. The president explained the advantages of this transaction as follows: "Kresge Department Stores, Inc., has been relieved of the burden of carrying large real estate holdings, and thus enabled to use its assets, which are practically all liquid, in the merchandising of its stores. It will rent the buildings from The Kresge Foundation on long term leases and on favorable terms."

The disposition of assets by the various methods above indicated presents no difficulty if the assets are not pledged as security for some loan. In case they are pledged, however, it becomes necessary to obtain the consent of the trustee, whose duty it is to make sure that the proceeds of the sale are used either to reduce the amount of bonds secured by the mortgage under which the property sold was pledged, or reinvested for the protection of the bonds

Reduction of Capital Stock

Taking up next the readjustment of liabilities, we come first upon the capital stock. The increase of capital stock as a means of distributing the surplus has already been referred to in Chapter XXVIII, Part I. We are concerned with the conditions under which the amount of capital stock may be reduced, or its form changed.

When the company has outstanding an amount of stock so great as to make it improbable that its earnings will ever reach a point where dividends can be safely paid, and especially when there has been such an accumulation of unpaid dividends on preferred stock as to make payment of dividends on common stock unlikely, the question arises, shall the capital stock be reduced to a dividend paying basis? When the value of the stock, because of the remoteness of dividend payment, has fallen to a nominal figure, this question may be answered in the affirmative.

A company, for example, with $500,000 of surplus earnings applicable to dividends cannot, as a rule, safely pay out more than $300,000. If $250,000 of this $300,000 is required to pay preferred dividends, and if the amount of common stock is $10,000,000, the $50,000 remaining equals only one half of one per cent on the total common stock. There may also be accumulated dividends on the preferred stock, making the payment of dividends on the common stock even more improbable. Common stock, under these circumstances, will usually sell for a nominal figure, under $5 a share. Very little of it can be sold at any price. If, however, the $10,000,000 of common stock could be reduced to $1,000,000, and the accumulated dividends on the preferred stock liquidated, the company would have enough surplus earnings to pay 5 per cent on its common stock, which might be expected to sell at from $50 to $60 a share. The proposition made to the common stockholders to exchange, say, ten shares of the old stock for one share of the new stock should be acceptable, since

they obtain an income at once, and also a free market for their securities. In case the increased earnings of the company eventually make it possible to pay a high dividend on this reduced capital stock, the stock retired may be returned to the stockholders in the form of stock dividends, maintaining a dividend rate at a reasonable figure, and placing them again in their original position so far as concerns the par value of their holdings. This method was employed by the General Electric Company, which in 1898 reduced its stock 40 per cent; in 1902 returning the amount to its stockholders in a special dividend.

In the unprecedented depreciation of security values during the last two years, many corporations have found it profitable to apply some of their surplus cash to the purchase of their own stock, when this stock can be acquired at less than book value. This redemption has been particularly advantageous for certain management investment trust and finance companies where the book value of shares can be easily calculated on the basis of market quotations and where, owing to the poor showing of profits made by many of these organizations, their shares have been depreciated far below the book value of the holdings. As an example, the Kidder Peabody Acceptance Corporation, in August, 1932, had over $4,000,000 of cash on hand. It offered to purchase its preferred stock at $40 per share, which was showing $3.06 per share earned. This represented a return to the corporation of 7.6 per cent on the amount invested in these shares, and the book value of the preferred stock was substantially greater than $40.

Reduction of Stock to Extinguish a Deficit

A corporation may have sustained heavy losses which have impaired its capital and which show as a deficit on the balance sheet. This is an undesirable situation, no dividends can be paid while the capital is impaired, and the credit of a company in this situation is damaged. The

deficit can be easily converted into a surplus (1) by reducing the number of shares, or (2) by reducing the par value of shares, or (3) by exchanging par value for no par value shares. When the method last mentioned is used, the "stated minimum" capital must be placed low enough to create a surplus.

Capital Reorganization Plan of the International Mercantile Marine Company

A recent illustration of the reduction of stock is the readjustment of the capital account of the International Mercantile Marine Company. This company, in 1928, reported net earnings after depreciation of only $1,205,250. Its accumulated deficit was $25,620,122. With $51,725,000 of preferred and $49,871,800 of common stock coming after $21,462,000 of 6 per cent bonds, it was, from the standpoint of its stockholders, in a very dubious position. Unpaid dividends on the cumulative preferred stock amounted to 80 per cent. Not until these accumulated dividends were either funded or paid, could the common stock expect dividends, and with the large balance sheet deficit, the payment of dividends on the preferred, even if earnings improved, was out of the question. At the same time, the company was in a strong financial position. Counting its insurance reserve as a current liability, it reported $44,678,658 of quick, liquid assets as against $13,009,233 of current liabilities, or a surplus of quick assets of $31,669,425.

The original proposal, which was approved by 99 per cent of the stockholders, by which the company could be put on a dividend paying basis, was to exchange one share of new no par preferred stock and five shares of common for each share of old preferred and to cancel all rights to back dividends. One share of new no par common stock was exchanged for five shares of old common. This plan was halted by an injunction obtained on the

ground that property rights of the preferred stockholders to accumulated dividends were ignored in the plan.

A second plan finally adopted provided for the payment of $200 a share to old preferred stock in settlement of back dividends, and its exchange, share for share, for new no par common. The old common stock received one-fifth share of new stock. The company now has outstanding 600,000 shares of no par value stock on which dividends can be paid when earnings permit.

Use of a New Company to Reduce Capital Stock

Such a readjustment of capital is sometimes accomplished by the organization of a new company which issues its securities for those of the old company and which, if the offer to exchange securities is generally accepted, takes over the properties of the old company. This readjustment is, in effect, a merger. The advantage is that if say three-fourths of the securities, whose form it is desirable to change, accept the offer, a recalcitrant minority can be left where they are to take what the directors give them in the way of dividends, or share in the proceeds of a sale, while the assenting majority go on their way rejoicing or sorrowing as the case may be, but at any rate assenting. The Central Leather Company in 1926 followed this plan in getting rid of a large deficit and 36¾ per cent accumulated dividends on its preferred stock. In the reorganization, new prior preference stock, and A stock calling for a combined prior payment of $8 per share, $1 over the 7 per cent rate on the old preferred stock, was offered the old preferred stockholders, together with $5 cash payment on each share which was a very substantial inducement to accept the plan.

A reduction of the capital stock of small corporations, whose securities have no speculative value, to a dividend basis, is feasible and desirable since it stops the accumulation of interest on the cost of the original stock to its

holders. With large public corporations, however, whose stock contains an element of speculative value, this method is not often available.

Reduction of Stock by Conversion into Bonds

The change from par to no par stock is a method in common use for eliminating a deficit. It may also open the way to necessary common stock financing. For example, the United States Rubber Company, in 1927, had large bank loans which pressed for payment and its common stock (par 100) was selling below $50. Under these circumstances, stock could not be sold. By changing from par to no par stock a sufficient amount of stock was sold at $38 per share to pay off most of the bank loans.

Stock may also be reduced by exchanging into bonds with the consent of the statutory proportion of the stock. This method is applicable to 7 and 8 per cent preferred stocks issued by companies which are later able to place junior issues of bonds at fair prices. The most notable instance of such a conversion is that of the United States Steel Corporation's bond conversion in 1902. On April 17, 1902, the president of the United States Steel Corporation issued a circular to the stockholders, which invited their coöperation in a plan to raise $50,000,000 of new capital. Half of this amount was to repay loans incurred by the constituent companies for construction work which was, in part, rendered unnecessary by the merger, but which, owing to advance commitments, could not be suspended. In addition, $25,000,000 was required for improvements, which, it was stated, would effect an annual saving of at least $10,000,000. The plan proposed to the stockholders for raising this money was

> to rearrange your corporation's capitalization (which, in round numbers, now consists of $300,000,000 of bonds, $500,000,000 of preferred stock, and $500,000,000 of common stock) by substituting for $200,000,000 of the preferred stock, $200,000,000

of sinking fund sixty-year five-per-cent mortgage gold bonds, and by selling $50,000,000 of additional bonds of such issue for cash. As the preferred carries seven per cent dividends, while the bonds would bear but five per cent interest, the $50,000,000 desired could, in this way, be added to the corporate resources, and the aggregate of the annual charges for interest and dividends, instead of being increased $2,500,000, would be decreased $1,500,000 as compared with the present sum total of these two requirements.

The plan offered to each preferred stockholder the right to subscribe to the new bonds to the extent of one half his holdings of preferred stock, 40 per cent of each subscription to be payable in preferred stock, and 10 per cent in cash, or the subscription could be limited to 40 per cent, in which event no cash payment was required. This transaction was assailed in the courts, and was delayed for a long period by injunctions. It was finally abandoned after $150,000,000 of preferred stock had been converted. Conversion of stock into bonds, such as this plan provided, can only be justified when the company making the conversion is so strong in surplus earnings that the issue of the new bonds will not jeopardize its solvency. Given this assurance, the advantage to the common stockholder is in the reduction of the payments which must precede his dividends, from the rate on the preferred stock to the rate of interest on the bonds issued in exchange.

Exchange of One Type of Stock for Another

Stock may be changed from common to preferred and common, or from preferred and common to one class of stock. It sometimes so happens that common stock, due to the passing of time, passes into the hands of estates whose custodians desire incomes with minimum risk, or if stockholders are still alive, they may wish to obtain greater security of income than common stock gives them. A conversion of a portion of the common stock into preferred stock is here indicated. In 1926, the officers of the

corporation owning the Brooklyn *Daily Eagle,* in a letter to the stockholders, made the following statement:

> Large blocks of the stock of the corporation are held by estates and other stockholders who have expressed a desire to rearrange their holdings, so that these holdings shall be represented by preferred stocks with fixed cumulative dividend rates and rights in the assets of the corporation prior to the rights of the common stock, while, at the same time, retaining a substantial participating interest in the earning power over and above the amount of the preferred dividends.

The method followed was the organization of a new corporation which issued two classes of preferred stock, common stock, and $750,000 of notes maturing in three annual installments. The stockholders of the old corporation received, for each share of common stock, one share of first preferred, one-half share of second preferred, and $50 of notes. The persons in charge of the management assumed the burdens of the new stock, in return for which they were allowed to purchase common stock in the new company at $10 per share. The method of a new company was chosen in order to make sure that the plan would succeed. With unanimous consent of the holders, the stock of the old corporation could have been readjusted along the same lines, but unanimous consent in such cases can seldom be obtained. As the matter was arranged, the old corporation continued to own the property, and the dividends on the stock which had been exchanged were paid to the new company to be distributed to the preferred and common stockholders, as their rights appeared. Non-assenting stockholders of the old company continued to receive their dividends as before. Such an arrangement is provisional and temporary. In time, all the stockholders can be brought into line, the exchange completed, and the companies merged by one of the two methods outlined in the chapter on methods of consolidation.

We next take up the readjustment of debt liabilities

of the company, dividing these into current liabilities, short term notes, and long term bonds. Current liabilities, when they exceed the normal amount in a particular industry, must be paid, either by the sale of some of the assets, or by the sale of bonds or notes. The methods of handling short term notes have already been briefly discussed in Chapter X, Part I.

Refunding Short Term Notes

When these are issued on the security of collateral, if a favorable opportunity arises to sell the collateral, provision is usually made for its retirement before maturity. When they mature, the method employed is either to sell the bond collateral and so obtain the means of payment, or to extend the notes, or to issue a new series of notes, or to take up the notes with an issue of stock. In most extension agreements, inducements are offered, usually in the form of higher rates of interest, or better security on the new issue. A syndicate may be organized to purchase the securities which are to be issued to take up those maturing, and then to offer to the holders of the maturing obligations the right to take the new securities on a favorable basis. The ordinary inducement is a cash premium.

The method of carrying through such a transaction is shown by the refunding of the $6,000,000 of 4½ per cent collateral trust notes issued by the Chicago, Rock Island & Pacific Railway Company in 1906. When these matured in April, 1908, the bond market was not in a condition to justify the offering of a long term security. The company, therefore, notified the note holders that it had arranged with Speyer & Company for the extension of these notes for one year, with interest at 6 per cent, subject to redemption at the option of the company on sixty days' notice. It was stated that "Holders who desire to extend their notes must present them, with the April 1st coupon, at the office of Speyer & Company, on or before

March 23d. A cash payment of $5 on each $1,000 note extended will be made to the holders availing themselves of this offer. Holders who do not desire to extend will receive par for their notes on April 1."

Speyer & Company had arranged with the Railway Company to purchase such an amount of the new notes as were not taken by the holders. The 6 per cent notes were offered at 99.5, yielding 6½ per cent per annum, so it is fair to presume that Speyer & Company did not pay over 95 or 96. The more advantageous the extension offer is made, the easier will be the terms that can be arranged with the syndicate, since every note replaced with a new note lessens the financial liability of the bankers.

The Deposit of Coupons

A method of funding floating debt, which has been used for the relief of embarrassed companies, is the funding or deposit of interest coupons. This may be accomplished by several methods. Arrangements may be made with a syndicate to purchase the amount of coupons which it may be impossible for the corporation to pay, taking the corporation's bonds as security, or the bondholders may be asked to take stock or bonds in lieu of their coupons, or they may be asked to deposit their coupons with some designated agent or trustee, foregoing their claim for interest during the period.

The first plan of funding coupons is illustrated by the following announcement to certain bondholders of the Erie by President Underwood on June 11, 1908:

To the Holders of Prior Lien Bonds and General Lien Bonds Under the First Consolidated Mortgage:

The extraordinary business depression, which has seriously affected all the railroads throughout the United States, has so reduced the net earnings of the Erie Railroad that there will be a deficit below the amount necessary to meet fixed charges for the current fiscal year ending June 30, 1908. While it is confi-

dently expected that with any return to normal business conditions this deficit will promptly be made good, it is necessary for the company temporarily to obtain the amount from other sources.

To this end, among other things, it has been arranged that the coupon for interest falling due at any time prior to July 1, 1909, may be purchased for cash and, with unimpaired lien, deposited and pledged under the collateral indenture of April 8, 1908, as additional security for the six per cent collateral gold notes issued and to be issued thereunder, thus making the notes more available to the company as a means of obtaining further cash if required, such notes to be accepted at par by the purchasers of the coupons for the amounts advanced for such purchase. While such temporary relief will probably suffice for the maintenance and operation of the property during the current calendar year, it will not be sufficient for the completion of the improvements begun two years ago, but which have not yet reached a condition where they are available for producing additional revenue for the company.

It was anticipated that the funds for such improvements could be provided from the sale of your company's general mortgage bonds, but, principally owing to the injury done to your company's credit by the falling off in earnings during the existing business depression, such bonds are not now salable, except at prohibitive prices.

As these improvements all serve to strengthen the security of the prior lien and the general mortgage bonds, it is expected that a plan will shortly be prepared for funding the coupons maturing on these bonds for a period sufficiently long to enable the company, out of its current funds, to complete the improvements now under way, and thus get the benefit of the large expenditures already made, but which, as above stated, remain as yet unproductive.

You are therefore notified that your coupons, falling due July 1, 1908, will be purchased at par for cash by J. P. Morgan & Company, upon presentation and surrender thereof, on or before June 30, 1908, at their office, No. 23 Wall Street, New York.

The foregoing plan involved the sale to a syndicate of a sufficient amount of the collateral trust notes of the company to take up maturing coupons. The coupons so

purchased, aggregating $3,160,480, were to be pledged under the indenture of the collateral trust notes, and the bankers accepted for their advances an equal face value out of $4,500,000 of the $15,000,000 note issue of 1908 which had been reserved for the purpose of paying them. When these notes were paid, the liability of the company, on account of these coupons, lapsed.

Bonds Offered instead of Cash

This relief to the finances of the Erie was not considered sufficient, and a further proposition was made to the bondholders, that they should accept bonds of the company, instead of cash, for the coupons. This proposition, as finally approved by the Public Service Commission for the Second District of New York, was as follows: The company was to issue $30,000,000 par value of collateral trust thirty-year 5 per cent bonds secured by general mortgage bonds which had been authorized but which, as the statement of President Underwood shows, could not be sold at reasonable prices. These bonds were to be exchanged for coupons on the general lien and convertible 4 per cent bonds up to the amount of $11,380,000, on the basis of par value of bonds for the face value of the coupons. The company, on its part, agreed to expend from income every six months, for improvements and additions to the property, an amount equal to the interest so funded which had accrued during the six months, this arrangement to continue for the five years during which the funding of coupons was to go forward. The advantages of this arrangement to the company and to the holders of these junior mortgage bonds were as follows:

Advantages of Accepting This Proposal

The company was relieved of the necessity of paying interest, which at that time was not being earned, and was assured of $11,380,000 of new capital within five years on

which it paid 5 per cent interest. The refunding scheme did not relieve it from the obligation of providing the money necessary to pay the interest on these junior lien bonds, but enabled it to apply this money to the improvement of the property. To the bondholder the advantages of the reorganization were even more apparent. They were set forth in a statement issued on behalf of the company as follows:

We have put into the property in the last few years upward of $16,000,000 that has not been capitalized—$8,154,381 charged against income and $8,345,829 charged to capital account, and not yet represented by any bonds. In seeking to capitalize these expenditures, we are asking the assistance of our bondholders instead of outside investors, believing that we can get such assistance from the bondholders on much more favorable terms. As you will notice, the coupons are to be exchanged for the new bonds at par, whereas on the balance of the issue not consumed by the funding of the coupons or the refunding of the three year notes, the Public Service Commission fixes a net price to the company of 87½.

We have, awaiting completion, on the Erie & Jersey Railroad and the Genesee River Railroad lines and others, important improvements in the shape of cut-off and low-grade lines into which we have put millions of money. We are not yet in a position to reap the benefit of these improvements because it will require several millions to complete them, and we do not feel that we can take the amount necessary to complete them from operating income. Therefore we are undertaking to defer the interest on the general lien and the convertible four per cent bonds and to put the equivalent amount into the completion of the improvements in question, so that at the end of the five years, the road will be in a position to take up all its obligations and operate at a profit.

There is hardly any question as to our ability to do this. In every year from the reorganization until last year the Erie showed a surplus, including coal properties, of from $4,000,000 to $7,000,000 over its fixed charges. Last year, on account of the extraordinary conditions, there was a deficit, but the first six months of the current fiscal year show a surplus from operation, and when the revenues from its coal are taken in, there is a surplus of $2,000,000 for the six months. This is after all the

interest has been paid, including that which it is now proposed to defer, so that I do not think there is any reasonable possibility of our being unable to put the required amount into the property out of income from year to year.

If the Erie did not obtain new capital, it must abandon improvements on which a large amount of money had already been expended and which were as yet unproductive. Unless this work could be carried through, the prospects of the company were gloomy. With the new capital, however, there was every reason to believe that the Erie could be placed on a basis of assured solvency, and that no such desperate remedies as that explained in the announcement of President Underwood would in fact be necessary. The bondholders were not asked to forego their interest. They were merely invited to invest their interest in the 5 per cent bonds of the company, which would be well secured and marketable at a price near par. The plan of the Erie for the funding of coupons was unusually favorable to the bondholders. They were to receive their interest in the form of salable bonds, and were assured that the amount of the interest would be invested in the property.

It was not found necessary to put this plan into operation, owing to the improvement in the bond market, which enabled the Erie to obtain the necessary money by selling its bonds as originally contemplated.

Deposit of Coupons as a Means of Deferring Interest

In most cases, the bondholders do not receive so much consideration, the alternative being presented to them of either depositing their coupons and foregoing, for a time, their claim to interest, or taking the chances of bankruptcy. In return for the deposited coupons, the company may issue negotiable receipts or notes secured by the coupons. The usual method, however, is a simple postponing of interest without any securities being issued in

exchange. The funding of coupons is in reality borrowing money to pay interest and paying interest upon interest, or, in other words, pyramiding interest. Two plans may be followed. A committee may be organized to represent the bondholders. With this committee the bondholders deposit their coupons for the number of interest periods agreed on, with the understanding that within a certain period of time the interest will be paid by the company. If this agreement is not carried out, or if a receiver is appointed for the company, the bonds themselves are to be deposited with the committee. Another method is for the company postponing interest payments to issue notes secured by the coupons deposited, evidencing the amount of the deferred interest. These notes mature at the date fixed as the termination of the relief period, and bear interest. If the company defaults on the payment of interest on these notes, the principal of the notes already issued becomes due; and if the principal is not paid at maturity, it may be provided that the coupons shall be returned to the holders of the notes. Here again appears the great advantage of a permanent organization of bondholders. Were it not for the cold douche of suspicion which the establishment of such an institution would cast upon the future of the bonds, an insurmountable obstacle to their sale, such a committee should be established for every bond issue, and every bond should be registered. A more practical method would be to give bondholders of every company voting power in the company that issues the bonds, through a corporation in which they would be stockholders and which would be empowered to act through its directors on all matters affecting the interest of the bondholders. Since the influence of such a corporation would naturally be exerted in favor of conservative administration, the effect would be beneficial. However, the cost of such an organization would have to be carefully considered as it might be out of all proportion to its benefits.

Conversion of Bonds into Stock

Taking up now the readjustment of long term bonds, we have, first, the conversion of bonds into stock; this has been already fully discussed under the head of convertible bonds. In Chapter V, Part I, it was shown that the advantage to the company in using convertible bonds which were eventually exchanged for stock was, in effect, the sale of stock at a higher price than could have been obtained for the stock in the market and also, upon conversion, a reduction of its fixed charges and a resulting improvement of its credit. The advantage to the stockholder is an opportunity for a speculative profit, or to exchange his 4 or 5 per cent security for a stock whose dividends may rise to such an amount as to show him a large yield on his investment.

Conversion of One Issue of Bonds into Another

The usual adjustment necessary in long term bonds is their extension or the conversion of one issue into another. If a sinking fund is maintained, and this is now the rule even when assets are not exhausted by the operations of the company, it usually occurs that a portion of the bonds are left outstanding to be paid at maturity, or to be refunded.

If it is not possible to sell new bonds to take up maturing issues, the method of extension is usually followed. The bonds to be extended are deposited with some trust company, and are stamped "extended" to a later date, afterwards being returned to the holders. Bondholders not assenting to this arrangement are paid off in cash, the banker furnishing the funds, and taking the bonds so purchased for later sale. Inducements to extend usually take the form of a small cash payment on each bond. Little difficulty is experienced in securing the assent of most of the bondholders to such an arrangement, if the alternative is a receivership. The cash bonus is also an

influential factor. It should be remembered that interest on such bonds is usually being paid. The extension, moreover, disturbs neither interest nor security.

High Rates of Interest Produced by Refunding

An additional reason for refunding bonds is found in the fact that new enterprises usually pay high rates of interest, owing to the limited demand for such unseasoned securities. If the corporation succeeds, its credit will improve to the point of placing bonds at much lower rates. A considerable saving can therefore be made by taking these bonds up with other bonds bearing low rates.

Refunding of bonds may take place either before the bonds mature, or at maturity. If bonds are issued subject to call at a fixed price, no difficulty is presented in retiring them. If, for example, a corporation issues $1,000,000 of 6 per cent bonds at 90, callable at 105 after three years, and if its credit improves to the point of selling a 5 per cent bond at 95, it is profitable for the company to call the 6 per cent bonds, replacing them with an issue of 5's. The economy of the transaction can be represented as follows:

Amount of 5 per cent bonds at ninety-five required to produce $1,050,000	$1,105,263
Interest at 5 per cent on these bonds	55,263
Interest on the 6 per cent bonds which are retired	60,000
Annual saving	4,737

The recent simplification of the capital structure of the Associated Gas & Electric Company by which a large number of subsidiary company bonds were converted into 5½ per cent debentures offers an illustration of this method. The method generally followed is an offer of the new bonds on favorable terms to holders of the bonds to be retired. To the extent that this offer does not bring in the bonds, and if they are callable, they are paid in cash. If not callable, they remain outstanding as obligations of the subsidiary company.

Other Reasons for Refunding

Conversion before maturity is sometimes made in order to provide for new financing with first mortgage bonds which do not have the provision in the mortgage that these bonds can be issued for securities purchased. The opportunity may arise for acquiring control of desired properties, by exchanging bonds which carry stock control with them. The bonds outstanding under the first mortgage, however, present an obstacle to this transaction. In such a case, the bonds can be called and replaced with a new issue secured by a mortgage containing the desired provision.

It is also frequently desirable to refund bonds whose authorized amount has been exhausted in order to replace them with bonds providing for an ample bond reserve or with bonds secured by an open end mortgage. Here the method illustrated by the Brooklyn *Eagle* recapitalization is often followed. A new company is organized, to which is transferred the properties securing the various bond issues which are to be refunded. An offer of new first mortgage bonds of the consolidated company is then made to the holders of the underlying bonds to exchange their bonds on an attractive basis, for the bonds of the new issue; or the underlying bonds, if their holders will not exchange and if they are callable, are paid in cash; or, if neither of these two methods is available, the small amount not converted are allowed to remain as first liens on the property until they are finally paid. Bondholders can make no effective objection to the transfer of property securing their obligations. Their security is not impaired since they retain the same position in relation to the property.

Special Arrangements in Connection with Refunding

When such a conversion is contemplated, the cost can be greatly reduced if a large amount of the bonds, whose

holders are not entitled to information concerning the intention of the buyers, can be purchased at the regular market price. The 5 per cent bonds, for example, which might be callable at 105 would not sell for more than 95. In anticipation of the conversion, arrangements are made with the house which placed the bonds to accumulate as many as possible, in the interest of the corporation, at the market price. In this way, the premium need only be paid on those bonds which it is impossible to secure.

When bonds are not callable before maturity, and if they cannot be purchased at reasonable prices in the interest of the company, certain inducements must be offered to the holder. These may take the form either of better security on the new bonds, or a higher market value in the new bonds than those which are retired, or a bonus of cash or stock.

When bonds are called at maturity, they may be taken up with stock or with new bonds or with notes, or the old bonds may be extended. The methods of accomplishing these various forms of refunding have already been considered in connection with the handling of maturing note issues and require no extended discussion here. The usual method is to employ the bonds of an issue previously authorized for the purpose of refunding. Provision is made in the mortgage for satisfying the claims of all maturing bonds, and for releasing the property from the underlying mortgages in order to bring it under the first lien of the general mortgage. When the bond market is unfavorable, short term notes, with the new bonds as collateral, may be employed to fund maturing bonds, or the bonds may be themselves extended. In such an event, an underwriting syndicate is usually employed to buy and extend the bonds of those who do not accept the company's offer.

CHAPTER XLV

REORGANIZATION BY COURT ORDER

A feature of reorganization in recent years has been partial or entire dissolution of corporate structures under court orders in order to cure unlawful monopolistic situations. It will be remembered, from our discussion of the holding company as a device for limiting competition, that this result was accomplished by placing a controlling interest in the stock of each former competitor in possession of a holding company which issued its own stock in payment therefor. When the holding company was declared unlawful, it was required to submit a plan of dissolution or reorganization for the approval of the court.

The Northern Securities Company Dissolution

The first large company to be dissolved as a result of the enforcement of the Sherman Law was the Northern Securities Company. The method employed was a *pro rata* distribution of the stock of the Great Northern and Northern Pacific among shareholders of Northern Securities. The proceedings were enlivened by an intervention on behalf of the Union Pacific interests in opposition to the *pro rata* plan. It was argued on behalf of the petitioners that the plan, if carried out, would vest the control of both railway companies in the same individuals—the Morgan-Hill group—who originally organized the Northern Securities Company, and who were still acting in combination to direct the management of the two companies—and would thus render the decree of the court ineffectual. It was also contended that the Northern Securities Company never

acquired title to these shares, and must return what it received to the persons or corporations originally depositing them. If this petition had been granted, the effect would have been to place the control of the Northern Pacific in the possession of the Union Pacific since they turned over to the Northern Securities Company a majority of the total stock of the Northern Pacific.

The Supreme Court early in 1905 decided adversely to the petitioners. The Court held that the question of the perpetuation of an unlawful condition of monopoly was a matter for the Attorney-General to take up, and that the Northern Securities Company was the actual owner of the shares transferred. It followed, therefore, that a ratable distribution of the assets of the Northern Securities Company, namely, the stock of the Great Northern and Northern Pacific, was the only lawful method of effecting a dissolution. The Union Pacific interests, by the execution of this plan, received minority interests in both companies, which were soon after sold and the proceeds invested in other railway stocks. The effective control of the Great Northern and the Northern Pacific remained for a time in the Morgan-Hill group. In recent years, however, the stock holdings and directorates have tended to separate.

Standard Oil Dissolution

Next in order, and following closely the lines of the Northern Securities plan of dissolution, came the dissolution of the Standard Oil Combination. This consisted of thirty-eight companies, with a combined capital stock of $154,090,450, of which $138,653,730 was owned by the Standard Oil Company of New Jersey, itself an operating, as well as a holding, company. The Standard Oil Company, in July, 1911, announced that it would comply with the decree of the court by distributing *pro rata* its holdings in thirty-three of these companies to its stockholders. For example, a holder of $100 par value of stock in the Standard Oil Company would receive in that distribution, in stock of

the National Transit Company—$25,455,200 par value, substantially all of which was held by the Standard Oil Company—$25.45; in stock of the Standard Oil Company of California, $17.00; and in stock of the Waters Pierce Oil Company, $0.27.

Criticism of the Plan

This plan of dissolution was severely criticized. It was claimed that the dissolution made no change in the control; that the distribution of the oil industry among the former subsidiary companies of the Standard remained as before, and that the same individuals who dominated the industry because they named the directors of the holding company which in turn named the directors of the subsidiaries, after the dissolution, named these directors the same as before, by voting the stock in the various companies now individually held.

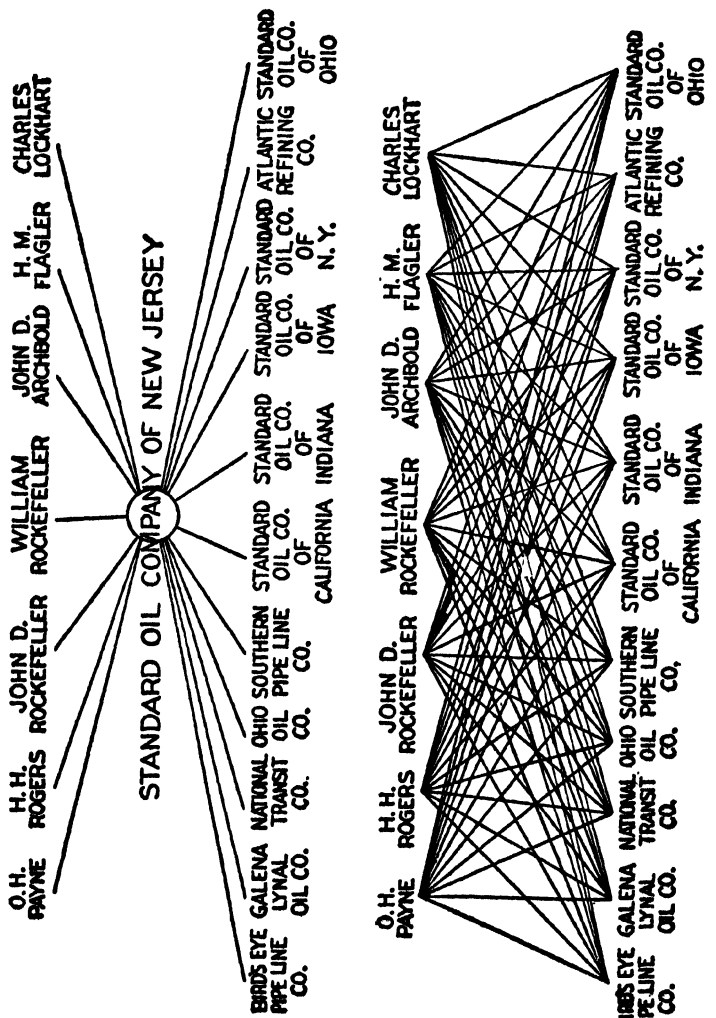
Examination of the Diagrams

To understand the situation, the accompanying diagrams may be examined. The first shows the control of the companies included in the Standard Oil Group before dissolution. It will be noted that the stockholders own one company which, in turn, owns other companies.

The second diagram shows the situation after dissolution. The individual stockholders no longer own one company but many companies. The percentage ownership of each is the same as the percentage ownership in the holding company. Instead of one owner of each company, the old Standard Oil Company of New Jersey, there emerge many owners.

Difficulty of Control After Dissolution

A comparison of the two diagrams shows that the criticism that the monopoly of the Standard Oil Company had not been destroyed by the dissolution is not well founded in a permanent situation. Mr. Rockefeller, Mr. Rogers, *et*


O.H. PAYNE
H.H. ROGERS
JOHN D. ROCKEFELLER
WILLIAM ROCKEFELLER
JOHN D. ARCHBOLD
H.M. FLAGLER
CHARLES LOCKHART
STANDARD OIL COMPANY OF NEW JERSEY
BIRDS EYE PIPE LINE CO.
GALENA LYNAL OIL CO.
NATIONAL TRANSIT CO.
OHIO OIL CO.
SOUTHERN PIPE LINE CO.
STANDARD OIL CO. OF CALIFORNIA
STANDARD OIL CO. OF INDIANA
STANDARD OIL CO. OF IOWA
STANDARD OIL CO. OF N.Y.
ATLANTIC REFINING CO.
STANDARD OIL CO. OF OHIO

al., may have been able to perpetuate the control during their lifetimes, because they had been close business associates for many years, and because the executive officers of the constituent companies had formed the habit of keeping out of each other's paths. Any marked deviation from the habits of years in the direction of trade wars, price cutting, and the like, would be quickly detected and resented.

It is evident, however, that each stockholder, if he wished to continue his control of the industry, would be obliged to familiarize himself with the affairs of a large number of companies, a practical impossibility even for those who had grown up with the industry, and entirely out of the question for their heirs and the trustees of their estates. In theory the control could be perpetuated by individual control. As a practical matter, if it has been continued it must be by some other method than joint control, through informal conference and association. Control by a holding company is perpetual. Each year strengthens the bonds which unite the subsidiaries to the parent company and to each other. Effective control by individual ownership, however, is, even under the most favorable circumstances, even for a limited time, almost impossible to secure. No common bond unites the former members of the combination. Each one tends to go a separate road. Trade interest and trade sentiment may serve to harmonize conflicting interests, and the executives are likely to know each other better than if they must get acquainted from the outside. This situation may be, however, a hindrance rather than a help to the maintenance of a spirit of harmony and coöperation.

Modification of Standard Oil Plan in the American Tobacco Dissolution

The judges of the Southern District of New York, when called upon to approve the dissolution plan of the Ameri-

can Tobacco Company apparently took note of the criticisms of the Standard Oil Plan. In fact, this tobacco dissolution has furnished the model for all subsequent reorganizations of this character. No attempt was made to disturb individual ownership, although it was stipulated that individual holdings in former members of the combination might not be increased. But the tobacco business formerly dominated by the American Tobacco Company was by the plan of dissolution effectively broken up.

The American Tobacco Company directly or through stock ownership controlled the manufacture of 75 per cent of the United States output of smoking tobacco, 80 per cent of the plug tobacco, 79 per cent of the fine cut, 80 per cent of the cigarettes, 13 per cent of the cigars, 90 per cent of the snuff, and 93 per cent of the little cigars. The plan of dissolution distributed this business, factories, current assets, and brands among four large corporations, no one of which had to exceed 40 per cent of any particular product, and ten smaller companies. The method adopted was the sale by the American and its subsidiaries, to the new companies, of certain assets, the payment for these assets in preferred and common stock, and the distribution of the stock, or the cash avails of this stock, among the stockholders of the American Tobacco Company and its subsidiaries. The American Tobacco Company still remained, like the Standard Oil Company of New Jersey, an important factor in the industry. The non-voting preferred stock of the American Tobacco Company was given full voting rights which had hitherto been exclusively held by the common stockholders.

Dissolution Supplemented by Injunction

In addition, the defendant corporations and individuals, as well as the new corporations formed under the plan, were, at the request of the Attorney General, in order to

make impossible the reëstablishment of the monopoly, enjoined as follows:

1. From causing the conveyance of any of the assets distributed in this plan to any of the fourteen corporations mentioned, to any other of these corporations, either directly, or by consolidating the stock control.
2. From making any express or implied agreement among themselves relative to the control or management of any of these corporations by which monopolistic conditions would be reëstablished.
3. By any of said fourteen corporations retaining or employing the same clerical organization, or keeping the same office or offices, as any other of said corporations.
4. By any of the fourteen corporations (with certain exceptions) holding stock in any other corporation, any part of whose stock is held by any other of the fourteen corporations.
5. By any of the fourteen corporations doing business under any other than its corporate name or the name of a subsidiary controlled by it, and if the products were sold by a subsidiary, the name of the parent company should be disclosed.
6. By any of the fourteen corporations refusing to sell any product to a jobber except on condition that he purchase another product.
7. No officer or director in any of these corporations was permitted to be an officer or director in any other.
8. No one of the corporations should employ the same agents for the purchase of raw material or for the sale in the United States of any products, as the agent of any other corporation.
9. No financial or other intercorporate relations were allowed to exist among the fourteen corporations.

By these restrictions, the government attempted to deprive the individual stockholders, who were left in control of these corporations, former members of the illegal combination, of the power to influence their companies to set up again any of the machinery of restraining trade.

How did this plan meet the objections of the Supreme Court to the American Tobacco Monopoly? The attempts to monopolize the tobacco industry, in the opinion of the Supreme Court took four principal forms:

Evils of Tobacco Monopoly Permanently Prevented by the Injunction

A. Covenants of vendors and others, among themselves for long periods not to compete with the combination.

B. The absorption of the control of corporations supplying the elements essential to the manufacture of tobacco products (such as licorice paste and tin foil) and other corporate stockholdings.

C. The existence of controlling "power in the hands of the few."

D. The obtaining of control of the tobacco trade by wrongful and oppressive acts, agreements and arrangements.

In the opinion of the Circuit Court, the plan of dissolution as outlined above met each one of these objections to the former combination:

a. It [the plan] provides for the abrogation of all covenants made by vendor corporations, partnerships, or individuals, not to engage in the tobacco business, and for the termination of foreign restriction covenants.

b. The shares held by the combination in the corporation manufacturing tin foil and the voting shares held in the corporation manufacturing licorice are to be distributed. When that is done, none of the tobacco manufacturing companies of the plan will have any legal domination over the production of those essentials. So the evil of corporate stockholding is met by divesting the American Company of any interest in the snuff business, in the retail cigar business, and of its shares in other important corporations.

c. The evils, pointed out by the Supreme Court, growing out of the existence of power in the hands of a few to control the combination must be met by the destruction of such power. This power had its basis in the holding of a majority of the voting shares of the American Company by the individual defendants in this suit. It is proposed to destroy this power by giving the preferred stock of the American Company full voting power, by creating full voting rights in the preferred shares of other corporations, and by so distributing shares that, in the language of the petition:

> No small group of men, nor even the twenty-nine individual defendants in the aggregate, will own the control of any of the principal, accessory or subsidiary companies

> defendant, and the control of the American Tobacco Company itself and of the new companies to be formed, will be vested in a body of six thousand stockholders.

In addition to these provisions, this Court, at the instance of the Attorney General, will guard against the acquisition by the defendants of control in the future by enjoining them from increasing their aggregate stockholdings.

With this additional provision, I think the requirement that power of control be taken out of the hands of individual defendants sufficiently met. It is true that while shorn of legal control, they will own substantial minority interests in the different corporations, and that in the practical workings of the affairs of a corporation a minority interest, through the inaction of the majority, may often control it. But the control of this corporation lies in the majority of its shares, and if we see that the legal control of these companies is placed in hands other than those of the defendants, I think that we go far enough.

The next inquiry is whether the plan fairly meets the evil of obtaining control of the tobacco trade by oppressive tactics as well as the broad conclusions of illegality. . . .

When the disintegration among four corporations is accomplished, the business will be so distributed that no company will have substantially over forty per cent in volume or value of any particular line. Furthermore, I am satisfied that there is to be a fair distribution of brands as well as of business. . . .

Obviously, common ownership in the shares of the various companies cannot well be avoided. Each stockholder of the American Company has an undivided interest in its property remaining after the payment of its debts, when its assets are distributed among stockholders each is entitled to his proportionate share. When such distribution takes the form of corporate shares the necessary result is a common ownership of stock in different corporations. . . .

The objection to mutual stockholding is not that competition is eliminated in principle. Potential competition necessarily exists. *The same conditions do not continue indefinitely, stockholders die and estates are divided. Differences of opinion upon values lead to sales and exchanges.*[1]

Potential competition with an open market must end in real competition. But the objection is to present and not future conditions and from an economic point of view, I have always thought

[1] Italics are the author's.

it entitled to serious consideration. Manifest difficulties must attend the establishment of real competition between different corporations having the same body of stockholders. In the case of small corporations having few stockholders who directly participate in the management, they would be, perhaps, insuperable. They would decrease in proportion to the increase in the size of the corporation and the separation of the stockholders from the active management of their affairs, until—in the case of the disintegration of a corporation having vast assets and a very large number of scattered stockholders, they would be so minimized as hardly to warrant consideration even from an economic standpoint.

That which had made me pause in the present case is the concentrated common stockholding of the individual defendants, but the objection should not operate to prevent the acceptance of the plan, but should call for most rigorous measures of injunctive relief to keep the various corporations apart, independent, and free from connections or arrangements to prevent competition.

Criticism of the Plan

Judge Lacombe has made out a strong case for the plan of dissolution agreed on between the defendants and the government. The plan was severely criticized, notably by Louis D. Brandeis, afterwards Supreme Court Justice, who claimed [2] that it did not go far enough; that there should be sixty corporations instead of fourteen, and that the division of brands, etc., was unfair to the indepedendents in that it divided up the tobacco consuming territory in such a way as to continue the monopolistic condition. He also pointed out that the upward movement of tobacco stock prices, after the dissolution plan was announced, showed that the profits of the constituent companies, which he explained were the result of monopoly, were not to be lessened, that is, that the monopoly was to continue.

Plan Followed in Later Dissolutions

The plan adopted in the dissolution of the Tobacco combination, with various modifications according to individual

[2] Before the Senate Committee on Inter-State Commerce in 1911.

conditions has been adopted in all the dissolutions under the Sherman Law. In some cases, as, for example, the stockyard and terminal railroad companies owned by Swift & Company and Armour & Company, the controlling stock interests were placed in the hands of trustees to administer and sell. Sometimes the stockholders of the holding companies were forbidden to purchase the stock of a subsidiary. In most cases, however, the court contented itself with a formal severance of the companies, leaving stockholders' rights untouched save by injunctions against renewing the combinations. The separation of the anthracite mining companies from their railroad owners has been accomplished in some cases by sale to outside interests for cash. This was the disposition of the Lehigh & Wilkesbarre Coal Company by the Central Railroad of New Jersey; or a company is organized, like the Glen Alden Coal Company which bought the anthracite coal properties of the Delaware, Lackawanna & Western with a purchase money mortgage bearing 4 per cent interest. The stockholders of the Railroad Company were given the opportunity to subscribe to stock in the Coal Company.

So far as can be determined by the records of earnings and assets, the separation of properties illegally held in combination, so far from injuring the stockholders of these companies, has actually benefited them. This has been especially true in the oil and tobacco industries, while, on the other hand, the United States Steel Corporation, allowed to continue untouched, has shown, on the whole, a declining rate of return on its invested capital.

CHAPTER XLVI

RECEIVERSHIPS

In our study of the corporate mortgage we have seen how large and sweeping are the powers of the trustee in reference to the disposition of the corporate property in the event of bankruptcy. The trustee has the authority to enter upon the property of the corporation and to operate it, collecting the receipts. Out of the receipts he is to pay its debts. He may also proceed against the company, and secure a sale of the property under the mortgage, applying the proceeds to the liquidation of its indebtedness. The theory of the mortgage, therefore, is that the property of a corporation which fails to pay its debts is to be seized by the trustee and sold, the proceeds being applied in satisfaction of its obligations.

The powers of the trustee of a corporate mortgage have been taken over from the language of real estate mortgages. It is the custom, in case of default of interest or principal on debts secured by real estate mortgage, that the creditor should realize on the property of the bankrupt by having it forthwith sold under the authority of the court, compelling the owner either to bid enough at the sale to pay off the indebtedness or to forfeit possession of it. It is also not unusual in the settlement of the affairs of insolvent mercantile houses that the creditors should seize their stocks of merchandise and forthwith have them sold by the court for their benefit. While similar remedies are apparently preserved to the creditor of a corporation in the terms of the mortgage by which his bonds are secured, the theory of the corporation mortgage cannot, in many cases, be carried out.

Ordinary Mortgage Method Not Applicable to Specialized Property

Most business corporations are organized in the field of manufacturing, mining, or transportation. They conduct their business with properties, which, unlike real estate or merchandise, are highly specialized to some particular use, and can be used for no other purpose. Take, for example, the property of a railroad. It consists of terminals, on which stand certain buildings which can be used for nothing else than the purposes of the railroad; of certain real estate in the form of strips of land 100 feet wide and thousands of miles in length, between which runs the track, consisting of rails, spikes, fish plates, and ties, and laid in ballast. Over this track runs the railroad equipment consisting of cars and locomotives. We have here a different kind of property from a store building or a farm. The property of the railroad can be used for no other purpose than the transportation of passengers and commodities. If sold, it must be sold to another railroad company.

Railway Property Must Be Handled as a Unit

Furthermore, a railroad property is a unit. To the successful operation of a railroad, all the items above enumerated are essential. A railroad must have main lines and it must have branch lines. In many cases it controls other railway companies which furnish traffic. It must own large amounts of real estate at its terminal points, and must have the necessary number of cars and locomotives, a stock of materials, and a cash balance. All of this property is necessary to the operation of the road. No part of it can be separated from the others and sold without destroying a large part of its value. Furthermore, a railroad company may have valuable charter and franchise privileges, without which its operations could not be conducted. It has built up over a number of years a widespreading

business organization by means of which it obtains traffic. The value of this property depends on the income which can be obtained from its use. If we look on the value of the company's property as the capitalization of the net earnings accruing from the operation of that property, we must admit that, to the earning of these profits, not merely a physical property but franchises and business organization are indispensable.

It follows, therefore, that if the creditors of the company should enforce the liens of their mortgages, and should take the property away from the company, especially in those cases where the different mortgages cover different portions of the property, in which event the enforcement of their liens will break the property to pieces, a large part of the value of this property will be destroyed. In this value of the property, based upon its earning power, consists the security of creditors and the equity of stockholders. If, however, the creditors' claims are allowed to take their natural course of suit, judgment, attachment, and execution, the property of the company will be broken up, its working capital seized, the equipment hauled off its lines, its terminals taken from it, its organization destroyed; the franchises are perhaps lost and its earning power reduced to nothing. It may be impossible for the stockholders to recover any value from the wreckage of the company, and the security of even underlying mortgage bonds supposed to be fully protected by earnings may be seriously jeopardized.

Illustration of Difficulty of Enforcing Creditors' Liens

An illuminating illustration of the impossibility under certain conditions of the enforcement of creditors' liens, is contained in a letter addressed by the President of the Central Passenger Railway of Pittsburgh (a part of the Pittsburgh Railway System) in October 1924 to holders of the company's first mortgage bonds.

The only alternation of the interest continuation proceedings (this had been proposed) seems to be foreclosure. To bring such proceedings might result not only in disintegration of the system but in destruction of the financial credit especially necessary to foster at the present time,—not only would dismemberment of the system not improve the position of the underlying bondholders but would in all probability impair a valuable asset, that of unitary (city wide) operation. Since each of the several scattered bond issues now overdue rests on a relatively small section of the whole system, it would be practically impossible to operate such fractions as separate units. The constituent parts of the street railway system bear a value to the system as a whole, but the value to any single portion of holding the whole system intact is far greater. . . . Practically the only assets underlying companies have are franchises and tracks, hence, in order to operate the property, it would be necessary to build power plants or purchase power, construct sub-stations, purchase cars and build car barns. It has been over twenty years since the street railway consolidations, principally by long term leases, were made. To undertake to finance for cars, arrange for power, and create an organization to operate a separate property would mean considerable work and expense and in the end would not gain the results anticipated even if local transportation development did not depend on complete coördination. Because of the public interest involved, bondholders would in all probability find themselves in a position with the alternative of being obliged to conduct operations under these difficulties or again lease the line to an operating company. . . .

Diversity of Claims against Insolvent Corporations

When a corporation approaches insolvency, it usually occurs that different portions of its property have been pledged as security for various issues of bonds. If the company is operating a railroad, for example, there are several first mortgages covering the different divisions of the main line of the railroad. Then over these is probably spread the lien of a general or blanket mortgage. Tributary to the main line of the railroad are a number of branch lines, and each one of these may carry mortgages to secure issues of bonds. These bonds have probably been

delivered to the parent company in repayment of advances to the subsidiary company. The parent company may have pledged the bonds as security for an issue of collateral trust bonds. The equipment of the company may be leased under a car trust agreement. The company may operate terminal properties which have bonds outstanding against them. In addition to all these complexities of obligations, there may be unsecured debentures outstanding, issues of short time notes and bank loans, money due employees and concerns which have furnished supplies and materials to the railroad. Suppose, now, that each one of these creditors should undertake to enforce his claim against the company, which he has the right to do. Is it not evident that the property would be completely disintegrated in the contest of creditors? Each set of creditors would make off with a piece of the *corpus*, and the value of the property, after it had been torn to pieces by the creditors, would have little relation to its value as a going concern. The organization of the business would be broken up, its markets destroyed, its goodwill extinguished.

Necessity of Protecting the Property

It is manifestly the concern of all parties that the creditors should be prevented from exercising their rights under their various mortgages and liens, and that the property of the company should be placed beyond their reach so that its operations may be undisturbed, until such settlement of its affairs can be made as will preserve the value of the property. The unsecured creditors, if they obtain judgment and issue execution, can usually find some property to attach, some cash or materials which have not been pledged as security for any loan, but if they lay their hands upon the working capital of the company, they may compel it to cease operations, thereby reducing their chances of recovering anything more than what they have seized to zero. As for the secured creditors, if they sit passive and allow

the merchandise and bank creditors to prey upon the company, they may find their own security rapidly disappearing. But if they enforce their rights, then neither stockholders nor unsecured creditors are likely to receive anything.

Illustration of Situation Leading to Receivership

A typical situation resulting in an application for a receivership is described in a letter of President Bush, of the Western Maryland Railroad Company to the directors of that company in March, 1908, in which he sets forth the reasons leading to the receivership:

> The gross revenues of the railway for the six months ended December 31, 1907, increased $540,725, or 20.332 per cent, and the net revenues increased $350,176, or 30.224 per cent over those of the corresponding period of the last fiscal year, with a resulting surplus over all fixed charges, including the abnormally high cost of temporary loans and renewals.
>
> The company is not confronted with any failure of its revenues to cover its full fixed charges, and its business has maintained a steady growth with unmistakable assurance of continued development. It has, however, maturing obligations, arising out of its temporary provisions for capital expenditures, and it must at an early date encounter the problem presented by the commodity clause of the Federal rate law.
>
> As you are aware, this company has outstanding loans maturing April 1, 1908, to the amount of $3,776,750, secured by pledge of $5,037,000 of its first mortgage bonds. The market price of these bonds—originally in considerable excess over the loans, has, notwithstanding substantial increase in gross and net revenues, shrunk to a level below the face of the loans.
>
> It has now become apparent that the company will be unable to meet these loans or to provide additional collateral to secure their extension. In this situation, the company itself will, of course, be unable to borrow the money necessary to meet mortgage interest falling due on the first of April next.

Even a small company presents a similar situation. There are usually secured claims, unsecured claims, and stockholders. Enforcement of claims in bankruptcy pro-

ceedings means death to the company and heavy losses to the creditors.

It may be possible to secure the coöperation of all creditors in deferring the enforcement of their claims, and to give the company an opportunity to recover itself without the expense of a receivership. When there are only bondholders to consider, in case the holders of the number of bonds, without which the trustee cannot be forced to act, can coöperate in protecting the company, the necessary relief can be afforded without a receivership. Sometimes bondholders' committees will advance funds to meet pressing claims. It is very difficult, however, to bring together in a relief agreement the creditors of a large corporation, and the property must therefore be protected against their assaults.

Desirability of a Permanent Organization of Bondholders

The advantages of a permanent organization representing bondholders both before and after default is generally admitted. Such an organization by enforcing the covenants of the mortgage in reference to maintenance, depreciation, and the cost and value of new property paid for out of the bond reserve, would be able in many cases to prevent default, and after default occurs, the various organizations of bondholders could quickly confer and organize to make receiverships unnecessary. With bearer bonds, however, no one knows who the holders are until they bring in their bonds for deposit with a committee.

Nature of a Receivership

The property can be placed beyond the reach of the creditors by invoking the aid of a court of equity, the direct representative of the sovereign power of the state which created the corporation, one of whose recognized duties is to take charge of the estates of bankrupt individuals, firms, or corporations, and to preserve this prop-

erty until the creditors can make a settlement with the insolvent corporation, or until a sale can be made of the property on more favorable terms than can be obtained by the creditors acting each for himself.

The court takes charge of the estate of an insolvent corporation through its agent, who is known as the receiver. The receiver is an officer of the court to whose charge is intrusted the estate of the corporation. The judge, in placing the property of the company in the hands of a receiver, takes it away from the corporation, puts it out of reach of the creditors, and, in extreme cases, even if the company is solvent, removes the property from the control of an unfaithful or grossly incompetent management.

Procedure in Appointment of a Receiver

The reason for the appointment of a receiver has already been indicated, namely, to conserve the value of the company's property. He is often appointed at the instance of the directors, who see long before any creditor the impending insolvency of the company, and who, at the first threat of disaster, fly to the shelter of a court of equity. The situation is something as follows. A Federal judge is approached by directors of some corporation which is in difficulty, either in his court room or privately. Accompanying the directors is a creditor of the company.

The attorney of the company informs the judge, to whom, in most cases, he is well and favorably known, that his client, the A. B. Corporation, is insolvent and he produces a creditor as evidence of the fact. The creditor states that the company owes him certain money, and the officials of the company are there present to confirm that the debt is due, and that the company is unable to pay it. In the interest of all parties concerned, therefore, the court is asked to appoint a receiver to take charge of the property until a settlement of its affairs can be obtained. The plea is forcibly made that unless the court intervenes, by ap-

pointing a receiver, the creditors of the company will seize upon its property, and will render it unable to perform its functions. It may be represented that the embarrassment of the company is due to special and exceptional causes, and that, if the court takes its property under its protection, a few months of receivership will suffice to extricate the company from its difficulties. This procedure is known as making out a *prima-facie* case for the appointment of a receiver.

Different Interests to be Considered

If the judge suspects no fraud in the matter, he forthwith appoints a receiver, first temporarily, until the other parties in interest can have an opportunity to be heard, and afterwards, unless good reason appears for discharging the receiver, the receivership is made permanent. While insolvent companies do not often present such a complex situation as we have outlined, there are usually at least three conflicting interests to be considered: secured creditors, unsecured creditors, and stockholders. The stockholders, it is true, have no claim against the company for money loaned, but they have an interest in the company which will be sacrificed if its property is torn from it. It may happen, for example, that the embarrassment has been caused by the maturing of a note issue which, owing to the condition of the bond market, cannot be funded at that time. Otherwise, the company may be abundantly able to meet its obligations. The stockholders have here an interest which deserves recognition and protection.

Qualifications of the Receiver

The receiver whom the judge appoints is usually an official of the corporation, often its chief counsel. The reason for making such an appointment is that the judge, not being familiar with the operation of a railroad or manufacturing concern, wishes to install one conversant

with the business and who can carry it on successfully. If he appointed a stranger to the property, it might suffer injury. When a receiver is shown unfit to hold this position, or if it can be made to appear to the court that, with a particular receiver in control of the property, bankers will not come to its assistance, the receiver may be removed. When large public companies apply for the appointment of a receiver, the court is usually careful that the appointment is acceptable to all interests concerned. President Bush, of the Western Maryland Railroad Company, for example, was appointed receiver of the property of that company. On the other hand, in 1893, President McLeod, of the Philadelphia & Reading Railroad Company, who was at first appointed receiver, was later forced to resign, owing to the opposition of banking interests who held him responsible for the failure of the company.

Duties of the Receiver

Immediately following his appointment, the receiver assumes possession of the property of the company under the authority of an order of the appointing court, which usually authorizes the receiver:

1. To take possession of the property of the corporation; to keep this property in good condition and repair, and to operate the property just as the corporation operated it; provided either that operation will show a profit, or if it appears that operation even without profit will preserve the value of the property for creditors and stockholders. In many cases also, if the receiver finds that the business cannot be saved, that the causes of default indicate that its case is hopeless, he will obtain an order from the court to sell the property at the best price obtainable and apply the proceeds, after deducting his fees and expenses, to the payment of debts in the order of their priority. Receiverships of mercantile and manufacturing property frequently take this course. If the property is

subject to a mortgage, however, the method of foreclosure, outlined in later chapters, is necessary.

2. To receive the income from the property and to apply this income under the direction of the court to the payment of operating expenses and fixed charges;

3. To collect all debts due the company, and to defend all suits to which it may be defendant.

In the performance of these functions, the receiver may employ such counsel or agents as he may deem necessary. He must ascertain as accurately as possible the status of the corporation, and make a report to the court. He must also make further reports from time to time, and must obtain express authority for any extraordinary action, such as the discontinuance of interest on bonds or the sale of certain property.

Why the Receiver Needs Money

In carrying out his duties, it is necessary for the receiver to provide money. When he takes charge, he usually finds a large amount of wages and audited vouchers due and unpaid. The property of the company has usually been allowed to deteriorate, maintenance and replacements having been, wherever possible, deferred while the directors were endeavoring to tide over their period of trial. He also finds various issues of bonds whose holders set up a claim to the earnings accruing from the operation of the business. There are also claims under leases of property which it is necessary for the company to retain. This situation requires that the receiver should provide a large amount of money at once to liquidate the more pressing claims against the company. He must then take up the question of dealing with the various creditors who may, in the meantime, have brought suit, usually in the court which has taken charge of the property, to establish their various claims. In carrying out these duties, the receiver must raise a considerable amount of money.

Sources of Receiver's Funds: Revenues

He has three sources to rely upon: first, such part of the income of the company as is not required to pay operating expenses, interest, and rentals: second, the interest and rentals themselves; and third, the use of a form of obligation known as the receiver's certificate. The receivership may have been caused by the inability of the company to fund or extend an issue of short time notes. Aside from this, the company may be solvent, able to pay all interest claims. If the property is earning more than enough to pay the fixed charges of the company from which it has been taken by the court, and in case the receiver elects to pay those fixed charges, he can use the surplus income in his hands to defray any proper expenses of the company. In but few cases, however, is this surplus income sufficient for the receiver's needs. He must obtain additional funds. These he gets, in the first instance, by reducing the fixed charges of the company, by simply declining to pay certain amounts of interest and rentals. The creditors are powerless. The property which secures their obligations is in the receiver's hands. They can obtain their interest only by an order of the court. If, in the opinion of the receiver, whom the judge usually supports, the needs of the property require such action, he need pay no interest, and may apply all of the money, which would otherwise go to the creditors, to pay pressing obligations. As a rule, however, when interest has been earned, it is paid by the receiver.

Position of Owners of Leased Property

The owners of leased property need not submit, unless they desire, to the forfeiture or reduction of the rentals. The receiver has no title to their property; his possession of it depends upon his carrying out the covenants of the lease under which the corporation secured it. The lessor company, in case he fails to pay their rental, may, at any time,

resume possession of the leased property, and may sue as general creditors for any unpaid balance on the rental or for any other damage which they may have sustained. When leases are profitable to the lessee, there is no danger that the receiver will run any risk of losing control of the property. With unprofitable leases, however, this method of refusing to pay rentals which have not been earned has been largely employed. Stockholders in the lessor company, in such a case, are deterred from acting in defense of their rights by the practical impossibility of making an advantageous arrangement for the disposition of their property elsewhere. In few instances, however, does the receiver carry his powers to this extreme. He is usually satisfied to pay interest and rentals where interest and rentals have been earned, and to refuse to pay only in those cases where the property has not produced a sufficient revenue to meet the specific charges upon it.

Receiver's Treatment of Contracts of Company

The same rule applies in the receiver's attitude toward contracts of the company. If, in his opinion, it is desirable to carry out these contracts, *e.g.*, for the delivery of coal, he does so. Otherwise, he disregards the contracts which are not the receiver's obligation. For the same reason, the receiver cannot bind any purchaser of the property, by a contract extending beyond the term of the receivership. Up to that date, however, he is liable, for his performance of contracts entered into by him up to the amount of the property in his custody.

Disbursement of Revenues by Receiver under Supervision of the Court

The disbursement of the revenues coming into the receiver's hands is made under the supervision of the court appointing him. An illustration of the method usually followed is furnished by the following quotation from an

order issued by Judge Lacombe, making permanent the receivership of the New York City Railway:

In the matter of improvements the receivers are fortunately relieved, at least in part, from the burden of devising improvements in the system by the existence of the Public Service Commission.

The receipts from car service will be devoted first to maintenance, including all necessary repairs and replacements. Next in order are certain fixed charges in the nature of rentals and interest falling due on various mortgage bonds of such roads, which by the terms of the leases, the New York City Railway Company has covenanted to pay. It would seem to be to the public interest, because of facility of transfer, that the roads which were being run by the City Railway when receivers were appointed, should be operated as a unit. For the present, therefore, the receivers will continue to pay such rentals and mortgage interest.

This will not include the rental of the Third Avenue Railroad which will fall due the last of this month. A clause in the lease of that road provides that default in the payment of any installment of that rental cannot be availed of for six months. Long before that time sufficient information can be gathered (and made public) by the receivers to give such enlightenment to the whole situation as will enable the court to deal understandingly with all questions as to payment of all these items of rent and mortgage interest.

Before default is made in any case (except the one above referred to and the rental due October 15 to the Metropolitan Street Railway) petition will be filed setting forth all the facts bearing on the question and asking instructions, and a day will be fixed on which not only the parties to the suit, but all in any way interested (including the Public Service Commission) will be heard as to the most equitable and wisest course to pursue.

Until further order, the receivers will, also, if the other parties to such arrangements consent, carry out the arrangement by which the New York City Railway Company operates certain railroads not under lease, such as the Dry Dock, East Broadway & Battery Railroad and the Union Railway.

Receiver's Certificates

To obtain the money required, the receiver usually resorts to the use of receiver's certificates. A receiver's cer-

tificate is, in effect, a short term note secured by a first mortgage upon all the property in the receiver's hands. It is true that when the property was in the possession of the company, the title to the property had been vested in a trust company to secure the payment of mortgage bonds. By the appointment of a receiver, however, the court takes the property of the company, and while it is in his possession he can incur obligations which must be met out of the value of the property before it is released. In law, the mortgage and judgment creditors have liens upon the property, which is in fact theirs, and which they are entitled to sell to recover the debt. But a receivership is set up under the equitable jurisdiction of the court and is, therefore, *extralegal*, though not *illegal*. While the court holds the property, it will issue no process of sale, nor is any higher court likely to vacate the receivership. Therefore the receiver's obligations are also the obligations of the court, and the property will not be released until they are paid. It is in this sense, but only in this sense, that receivers' certificates are said to be first mortgage obligations.[1]

The form of certificate is illustrated by those issued by the receivers of the Illinois Tunnel Company:

This is to certify that for value received Charles G. Dawes and David R. Forgan, as receivers of the Illinois Tunnel Company, and not individually, are indebted to the bearer hereof in the sum of one thousand dollars ($1,000), payable at the National

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[1] The position of receivers' certificates exactly appears in the following order made and entered on December 29, 1930, by the District Court of the United States for the Southern District of Ohio: "Walter N. Jones, the Special Master appointed by the Court to sell the properties of the Wayne Coal Company, has been authorized and directed to pay on or after January 20, 1931, out of the proceeds of said properties, the receivers' certificates issued under order of the Court . . . in the sum of $100,000 in priority to any distribution on the first mortgage bonds or to any other lien or claim upon said properties or their proceeds unless exceptions thereto are filed on or before January 10, 1931."

City Bank of New York, in the City of New York, or, at the option of the holder hereof, at the Continental National Bank, in the City of Chicago, two years from the date hereof, in gold coin of the United States of America of the present standard of weight and fineness, with interest thereon at the rate of six per cent (6%) per annum, payable semiannually, in like gold coin, on the first days of October and April, upon presentation and surrender, at one of the places therein specified, of the coupons for said interest as they severally mature.

This certificate is part of an issue of certificates of like tenor and date not exceeding in the aggregate the principal sum of three million five hundred thousand dollars ($3,500,000) at any one time outstanding, authorized by an order of the Circuit Court of the United States for the Northern District of Illinois, Eastern Division, dated the 16th day of March, 1910 and on said day filed in the office of the clerk of said court, entitled in two certain actions pending in said court and consolidated under the title of The Corporation Trust Company against Illinois Tunnel Company and Central Trust Company of Illinois, as Trustee, against the Illinois Tunnel Company, and others. This certificate is issued pursuant to and is entitled to the benefits and security specified in the foregoing order, subject to all the terms and provisions whereof this certificate is issued and held. Among other things it is provided in said order that:

"*Said certificates of indebtedness to the amount of the principal and interest thereof shall constitute a lien upon all the property of every nature and description of the defendant Illinois Tunnel Company,*[2] and upon the telephone system which may be constructed by the said receivers, and upon all equipment and other property that may be acquired or provided by means of the said certificates or the proceeds thereof, and upon all net earnings and income which may hereafter result from the operation of the property in charge of the said receivers, which lien shall be prior to the lien of the judgment received in this court by the Corporation Trust Company against the Illinois Tunnel Company on December 1, 1909, for $1,129,428.64 and prior to the lien of the First Mortgage or Deed of Trust, dated December 1, 1903, made by the Illinois Tunnel Company to the Equitable Trust Company, Chicago, as Trustee (under which indenture the Central Trust Company of Illinois is now the duly constituted and acting successor Trustee), and prior to the rights of the

[2] Italics are the author's.

holders of any and all bonds issued under the said First Mortgage or Deed of Trust."

These obligations are managed like short term notes. They may be issued to consolidate other issues of the same kind; they may be called at any time; or they may be extended at maturity.

Purposes of Receiver's Certificates

Money is provided by receiver's certificates for various purposes. These obligations are usually issued in small amounts, soon after the receiver takes charge, to pay pressing claims, *e.g.,* for wages and supplies. Larger issues may provide for repairs which are necessary to the operation of the property. As a rule, a receiver will go no further than this in asking authority to issue receiver's certificates. Bondholders can have no objection to the provision of money for the purposes indicated. It is true that the lien of the certificates precedes that of the first mortgage, but if the receiver did not provide the money, the property could not be operated economically and its value would dwindle to the injury of its creditors. Receiver Frederick W. Whitridge, who took possession of the Third Avenue Railroad on January 12, 1908, on May 9, reported to the Chairman of the Bondholders' Committee, showing the situation arising out of the previous neglect of the property with which the receiver must promptly deal, if he was to maintain and increase its earnings. This portion of his report is, in part, as follows:

Physical Condition.—The general conditions of the Third Avenue Railroad were very bad; there were no offices, no supplies, or material on hand; the shops had been neglected; the track was and is in very bad shape; the cars in need of extensive repairs. The power house alone was in good condition.

The supplies and material immediately necessary, most of which have been received, amounted to $50,000. Sprinkling apparatus in all of the barns and the cost of the various other fire apparatus essential to secure new insurance, the old policies,

after the repeated fires in the New York City Railway barns, having been nearly canceled, amounted to $135,000; I hope presently that the property upon the system will meet the requirements of the most exigent underwriters.

Car Repairs.—Of the 567 cars delivered to me by the New York City Railway Company receivers, there was not one on which some work was not immediately necessary. I ordered a sufficient number of new motors and controllers (50) to fully equip every car in the system. I estimate the total cost of putting all the cars in order, including the new motors and other electrical equipment, to be approximately $300,000.

Repair to Track.—In many places on the main line of the Third Avenue track the contact rail is completely worn away, the slot rail very thin, and the car rail worn to the breaking point. Paving of the tracks, in accordance with the city ordinance, with Belgian blocks, will save $5,000 or $6,000 a year in maintenance. Under a temporary arrangement with the New York City Railway receivers, we are to repair the crossings on joint account. Altogether there will be needed for the track this year about $436,000 and thereafter, with a liberal allowance for maintenance, I think no further expenditure will be necessary for some years to come.

Buildings.—The building at Sixty-fifth Street and Third Avenue needs extensive repairs to the roof, and in order to enable the shops to do their work certain other structural alterations are required, bringing up the total cost to about $151,000 for $14,821 of which amount I have let contracts.

At 129th Street and Third Avenue there is, in front of the car barn, a building used as a hotel and several tumble-down stores or saloons. I propose to clean out the main building and construct therein proper offices for the Third Avenue and other lines; also accommodations for a club for the employees, which are much needed. The whole improvement will cost nearly $106,000.

To meet the cost of these and other improvements and payments, the receiver stated:

I intend to ask the court for authority to issue $2,500,000 of receivers' certificates, payable within one year and bearing interest at the rate of six per cent. With those and the earnings from the property I think I can do all of the work and make all the payments which I have herein enumerated.

Certificates Sold to Complete a Property

Cases may arise, however, when receivers must go much further in the issue of these obligations than the payment of accrued wages and the making of necessary repairs. The property of the company, as with the Illinois Tunnel Company, may be only in part completed. Unless it is finished at once, it may not be possible to secure profitable business. For example, in anticipation of the construction of a power plant, contracts with consumers may have been signed whose binding force depends upon the delivery of power before a certain date. The company may have failed, leaving the plant half finished, and a receiver takes charge of the property. He finds a rival concern ready to run lines into his section and seize the market for power. The receiver, under these conditions, may have no choice but to issue receiver's certificates to obtain funds for its completion in order to deliver power and secure the benefit of the contracts. He takes this action as much in the interest of the creditors as of the stockholders. Unless receivers' certificates were issued, the power plant when finished would find its market absorbed by its rivals.

Receivers May Go Further than Conservation of the Property

Existing creditors of the company are opposed to the issue of receiver's certificates of large amount, and often appeal to the court not to allow the receiver to place this new encumbrance ahead of the lien on their security. Their pleas, in the case of public service companies, are, however, usually disregarded. The court stands by its own appointee, the receiver, and is usually guided, as to the necessity of the issue of certificates, by the receiver's recommendations. The amount of money which the receiver will spend upon the property depends on his conception of his duties. If he looks upon his obligation as merely to preserve the business, as it were, in a state

of suspended animation, doing as little as possible to repair or improve the property, merely protecting it from the onslaught of creditors until the different interests can be adjusted and the receiver discharged, he is not apt to issue more certificates than are necessary to pay the claims which press upon him in the form of unpaid wages, etc., when he takes charge of the property. If, however, he interprets the word conservation in its broad sense, he may conceive it to be his duty not only to preserve the property, but also to do all things necessary to increase its efficiency. In carrying out this obligation he may borrow large sums of money, and he may do a considerable amount of important work and even new construction. The most outstanding example of large use of the receiver's powers is furnished by the receivership of the Baltimore & Ohio Railroad Company.

Situation of the Baltimore & Ohio

The receivers appointed for the Baltimore & Ohio in 1896 were Mr. John K. Cowen and Mr. Oscar G. Murray. They were confronted with a difficult situation. The property of the company was in need of entire reconstruction. Ties, roadbed, rails, bridges, piers, cars, and locomotives were sadly in need of replacement or repair. The equipment of the company was particularly defective—a large number of freight cars and locomotives being out of service, and the equipment available for use being entirely insufficient to take care of the traffic offering. Moreover, the competitive situation of the Baltimore & Ohio was at this time peculiarly unfortunate. To the north lay the Pennsylvania, equipped to handle traffic at the lowest cost. On the south the Chesapeake & Ohio was a vigorous competitor, both for through traffic from the West and for the rapidly growing coal traffic out of West Virginia. Unless the Baltimore & Ohio was to abandon the field to its competitors, it must be placed in a position to carry traffic as

cheaply as they. In other words, the Baltimore & Ohio must be entirely reconstructed.

Should the receivers reconstruct the road, obtaining funds by the issue of their certificates, or should they content themselves with keeping the system together and in passable running order, leaving the work of rebuilding to the officers of the company after it had been provided with funds in a reorganization? The receivers wisely chose the first alternative, notwithstanding powerful opposition and a vigorous controversy between their supporters and bondholders who asserted that they were exceeding their authority as receivers. New capital must be eventually obtained. To delay the work of improvement meant at least temporary abandonment of the competitive field, and the loss of advantages which might never be regained. Mr. Cowen and Mr. Murray faced the issue squarely. As receivers of the Baltimore & Ohio they issued within two years $10,742,000 of receivers' certificates, in addition to a large amount of car-trust obligations. A portion of these certificates were exchanged for other evidences of indebtedness which had to be taken care of, but for the most part they were issued for new equipment, rails, and ties.

Large Expenditures by Baltimore & Ohio Receivers

Immediately after taking charge of the property, in May, 1896, the receivers obtained authority to purchase 5,000 new freight cars and 75 locomotives. In February, 1897, a thousand additional box cars were purchased, and in May of the same year 5,150 more cars were acquired. During this year 2,150 cars were obtained from coal companies on mileage contracts, and 3,000 cars were leased from the Pullman Company. Besides these heavy purchases of equipment, during the first year of the receivers' administration 220 freight engines, some of which had not turned a wheel for months, were sent through the shops and put into service. Special attention was

also paid to the way and structure. The track from Baltimore to Pittsburgh and Wheeling was relaid with new and heavier rails and new ties. Bridges, many of which were unable to bear the weight of heavy trains, were replaced; and large sums were spent on the construction of yards and sidings. Taking advantage of low prices, one of the features of the receivership was the placing of an order for forty thousand tons of eighty-five-pound rail, said to have been the largest order ever placed for rails up to that time. The price was seventeen dollars a ton. Not all the funds for these improvements were raised by the issue of receivers' and car-trust certificates. Earnings were heavily drawn upon, and in many instances bondholders were forced to wait until the property on which they had a lien was put into condition to earn the interest. In a word, the Baltimore & Ohio receivers rebuilt the road from end to end, and turned a new road over to the stockholders when the reorganization was completed.

Opposition of Mortgage Bond Creditors of the Baltimore & Ohio

This work, as intimated above, was not carried through without severe opposition. Suit after suit was brought by security holders to restrain the receivers from increasing the burdens of the property. It was urged that they were destroying the value of first mortgage bonds by their reckless issue of certificates, and they were advised that if new equipment was needed, it should be leased and not purchased. Their policy was denounced as a gross usurpation of power because, as it was charged, they ran counter to every precedent which should regulate the conduct of receivers. To this the answer was made that precedents were indeed violated, but that the situation with which the receivers had to deal was itself unprecedented. The receivers contended, and in this they were sustained by the court, that their policy was conceived in the interest of

the bondholders, and they insisted that it be carried through to completion.

Justification of Receiver's Policy

The policy of the receivers of the Baltimore & Ohio was abundantly justified during their term of office. During a period when the gross earnings of its competitors declined the earnings of the Baltimore & Ohio, as the direct result of its larger equipment and lower operating cost, materially increased. In 1896, earnings were $25,582,000 and in 1898, after the reconstruction of the property had been practically completed, they increased more than $2,000,000 in spite of a steady fall in rates. The contribution of operating expenses to the result is seen in the increase of the operating ratio from 69.26 in 1895, a ratio which directly reflected the inefficiency of the property, to 78.23 per cent in 1898, which represented the expenditure of a large amount of earnings upon improvements. The effect of these improvements upon the operating efficiency of the road is seen in a decline in the operating ratio from 76.70 per cent in 1899, to 65.53 in 1900. The Baltimore & Ohio receivers took extreme measures. They applied a desperate remedy to a desperate situation. Their success on this account was all the more conspicuous and brilliant.

Limitation of Receiver's Certificates in the Case of Private Business Corporations

The issue of receiver's certificates by corporations engaged in private business, whose operations are not affected with a public interest, is more limited than with public corporations. Receivers of private corporations may safely issue certificates to pay wage claims, insurance, supply bills, or tax arrears, and interest on bonds senior to the lien of the bonds which have petitioned for the receivership. If, however, the receiver wishes to raise money by the sale

of certificates for construction purposes it is customary to obtain the consent of the bondholders. The difficulty of obtaining such consent, in view of the wide distribution of bonds, and the reluctance of bondholders to subordinate the lien of their bonds to the lien of receiver's certificates, results in a narrow limitation of receiver's borrowing to purposes which are plainly necessary, and to which no bondholder can rightfully object. The courts are very reluctant to experiment with the property of lien creditors, and prefer to allow these creditors, after a reasonable interval, to enforce their claims.

Recent Developments of Receivership

Within recent years, the theory of receiverships has been broadened to include mismanagement as an adequate ground for putting into effect this extraordinary remedy. In appointing a receiver on the grounds of mismanagement the court is merely anticipating an appointment on the grounds of insolvency, since if the mismanagement continues, insolvency will be the result. The three conditions of an extraordinary remedy are here present: (1) a right of the stockholders to have the business wisely and honestly managed; (2) an invasion or violation of that right by the mismanagement in question; and (3) no adequate remedy at law since the management usually controls a majority of the stock, or at any rate, cannot be ousted in time to prevent serious damage. Courts are very reluctant to appoint a receiver for any other reason than insolvency, the inability to pay debts. It is not the function of the court to manage a business. There is no court organization for this purpose. Applicants for a receivership on the ground of mismanagement are usually refused on the ground that the stockholders should settle their own difficulties by electing new directors.

CHAPTER XLVII

REORGANIZATION WITHOUT FORECLOSURE

A receivership, followed by creditors' reorganization, is an extraordinary remedy for an extraordinary situation. Like a surgical operation, although it may save the life of a distressed corporation, it usually leaves the patient in a weakened condition from which his recovery is slow. And for the same reason that intelligent physicians only resort to the knife after all milder measures of treatment have failed, so the owners and creditors of a distressed corporation consult their best interests when they unite to tide over the crisis without resorting to a receivership.

Objections to the Method of Receivership

In recent years, there is a growing conviction among bankers and investors that there is a better method of settling the affairs of an insolvent company than the tedious, costly, and damaging course of procedure which has been discussed in the last two chapters. Not only is a receivership costly in money, but it is even more costly in prestige and business reputation. There is a general caution in dealing with a company which is in the hands of the courts. Receivers are generally cautious, even timid. Their duty is to conserve assets, pending sale or reorganization. They are strictly limited in their expenditures to the money necessary to keep the business alive. In some cases, *e.g.*, the Baltimore & Ohio receivership already described, circumstances may force the receiver into a policy of vigorous expansion, but these cases are exceptional. The receiver must obtain authority from the court for all un-

usual expenditures, and the court, knowing nothing about the needs of the business, follows the old rule: "When in doubt, do nothing." Even if the receiver is willing to launch an advertising campaign or install improved machinery, or make a long term contract for material at an advantageous price, he cannot count on obtaining authority for this action from the court. The receivership is temporary. In the mind of the judge, the property is being held for the creditors. If the receiver raises any large sum of money, it must be on the security of the property in his possession as an officer of the court. If the expenditure proved unprofitable, the creditors would bear the loss, and could hardly fail to criticize those responsible. The court could not fairly authorize such expenditures, as indicated above, without consulting the creditors, and if the creditors were well advised, they would object. Even if they have had a voice in selecting the receiver, they should not favor, save under the most exceptional circumstances, any expansion or rehabilitation program whose cost they might have to pay. Such matters are best left to the company which takes over the property after the receiver surrenders possession.

Serious Damage to the Business Often Results

But while the receivers must follow a cautious, waiting policy—perhaps best exemplified by the "Timid Soul" cartoons in the Philadelphia *Public Ledger*—such a policy, if long continued, is apt to inflict lasting damage upon the business. Railroads and other utilities which enjoy monopolistic advantages, over which people must travel and ship, or from which they must buy, can survive a receivership with little permanent damage. Their business suffers, it is true—no monopoly, save perhaps water, is entirely indispensable—but they usually recover. But as for manufacturing, financial, and trading companies, a prolonged receivership is often the road to ruin. Their plant deterio-

rates. Their customers desert them. They lose their position in the market and the public confidence so essential to their prosperity. Many of their best men leave them for more assured employment. The inevitable reduction of selling effort in a receivership, particularly in advertising outlay, weakens their goodwill. They are indeed fortunate to escape the final annihilation of liquidation.

The foregoing considerations are powerful arguments, as we have seen, in support of speedy reorganization. They are equally controlling when the question of a receivership is originally considered. If it is at all possible to avoid it, a receiver should not be named. The best informed financial opinion is now against this venerable device. In place of a receivership, we have two methods of financial salvation (1) the creditors' agreement, and (2) the voluntary reorganization without foreclosure or receivership.

Attitude of Creditors toward an Insolvent Company

The idea commonly prevalent as to the attitude of creditors toward a concern in difficulties is far from correct. A man who has advanced money, goods, or services to a concern is exclusively interested in obtaining a return of the value of what he has advanced. Contrary to common belief, creditors do not instinctively rush into a conspiracy to appropriate their debtors' business. They have troubles enough in running their own affairs, without seeking additional worry.

This is especially true of banks. The last thing in the world a bank wishes to do is to take over the business of some one who owes it money. If their attitude in dealing with their debtors were strictly acquisitive, the banks would long since have acquired title to a large part of the business property of the country. It is unfortunately true that sometimes no other recourse remains to creditors

than to take title to their debtors' property; but they do it only after every other means of obtaining repayment has been exhausted.

In readjusting the affairs of a concern in financial difficulties—that is to say, a concern which owes more than it can pay—the adjusters start with certain knowledge of the willingness of creditors to coöperate in any reasonable plan, either of liquidation or of readjustment. Liquidation is only resorted to when it is manifestly impossible to put the concern on its feet as a sound and prosperous undertaking.

If a brick-making concern, for example, has exhausted the supply of available clay, its creditors will not be interested in a readjustment proposition that involves its continuance in a losing venture. The only proposition which will gain their favorable consideration is some plan whereby the ground on which the plant is located can be sold for building purposes. The creditors of a woodworking establishment, which is badly located in view of competition and transportation facilities, and which is also of antiquated design, will not listen, if they are well advised, to any proposal to continue the business in its present location. On the other hand, a wholesale grocery business which is in difficulties, which has made too liberal use of credit, or whose proprietors have become involved in outside ventures, to the prejudice of their own business, can go to its creditors with a readjustment proposition with every hope of success.

Assurances Necessary to Gain Creditors' Coöperation

To obtain the consent of creditors to a friendly reorganization, assurances must be given: first, that the enterprise is financially sound, that is, profitable; second, that the management can be changed or controlled, so as to make unlikely a repetition of the mistakes of the past; and third, that the object and method of the reorganization

shall be such as to promise the creditors reimbursement within a reasonable time, having regard to the perpetuation and successful conduct of the business. If the creditors are reassured on these points, in almost every case they will cordially and helpfully coöperate in working out even a very unpromising situation.

There are certain exceptions to this rule, the most important of which is where the creditors have reason to suspect dishonesty or incapacity on the part of the management. If the creditors lose confidence in the integrity of the responsible head, it is hopeless for him to ask their help. The same holds true of any loss of confidence in his ability. In either event, if the business is to be saved by coöperation of creditors, the man or men responsible for its insolvency must first resign their positions with the company, and completely eliminate themselves from the situation. With these exceptions, however, it is unusual to find a creditor insisting on the letter of his bond. For instance, in one case, a grocery concern was heavily indebted to certain banks, and owed a much smaller amount of money to trade creditors. The banks, in this instance, having confidence in the honesty and merchandising ability of the owner, went to great lengths in assisting him, going so far as to allow him to pay his trade creditors, while extending their own obligations. Starting with this attitude of creditors, which is now general and to be counted upon, we may outline the method usually employed to readjust the affairs of a business in financial difficulties.

Securing Consent of Creditors to a Realization Agreement

This readjustment is carried out under an agreement, which is called a "creditors' realization agreement." An attorney of high standing is retained; and his retaining fee, liberal though it may be, is the most profitable investment that a business man, in the situation outlined, can

make. The attorney sends out letters to all the creditors, inviting them to a meeting, either in his office or in that of one of the creditors enumerated or in a hall hired for the occasion. The creditors attend such a meeting. They have all purchased tickets, sometimes paying high prices, and it is unusual to find many absentees. The meeting is called to order by the attorney, who presents the proposition of his client. He submits, at the same time, an accountant's report, giving the balance sheet and income account of the concern. His proposition is, in effect, as follows:

"My client is in difficulties. He owes you gentlemen money which he cannot pay. His business is sound if he can be given time and help, particularly time. Your security is in that business. The value of that business depends on its profits. If you insist upon the letter of your bonds, no alternative is presented except a receivership, and probably bankruptcy. If that is done, and after preferred creditors have been satisfied, little or nothing may be left for the general creditors. It is to your interest, therefore, to give favorable consideration to the proposition I am about to make to you.

"This proposition is, in effect, that my client will turn his business over to a committee of his creditors. He and his friends hold a controlling interest in the stock. This stock he will assign to the committee named by the creditors. The present directors of the company will resign, and their successors will be named by the committee. If the committee desires to continue the present management because of its familiarity with the business, it may do so. If it desires to replace the present management with outsiders of its own selection, that is within its power. My client stands ready to coöperate in every possible way to make the plan of rehabilitation a success.

"This business may need new capital. Its present owners, to the extent of their ability, will coöperate in

providing the capital. It may be necessary for the creditors to advance the funds needed, either in whole or in part. To secure these advances, they have the entire assets of the business. Of necessity, in case the advances are made, existing claims must be subordinated to the obligations evidencing these advances."

The attorney then throws the meeting open to general discussion. His clients are ready to answer any questions. Before calling the meeting, he or his clients have usually taken the wise precaution of conferring with the largest and most influential creditors, and of securing assurances of support for the plan. If possible, arrangements have been made for them to speak promptly and earnestly in support of the plan. A group of creditors is like any other crowd, easily swayed by influential personalities, anxious to stand well with their fellows, and to give the appearance of virtue even if it is absent from their hearts. In the conduct of such a meeting, immediate indorsement of the proposal is essential.

Several brief and emphatic speeches having been made by certain creditors, who, with apparent and most convincing spontaneity, rush to the front, the question is put "shall the proposed creditors' realization agreement be entered into?" If the plan is honest and sound, if it offers a reasonable prospect that it can be worked out, and if the meeting has been organized in its support in the manner suggested above, it is very unusual that any serious opposition will develop.

A Typical Agreement

An outline of one of these agreements will show the plan and method of this modern form of financial readjustment. The situation is briefly set forth in two clauses:

1. Whereas, the Company is largely indebted, but has assets consisting of fixtures, merchandise, stock on hand used in its business, book accounts, cash, good will, etc., which assets

if properly handled or administered it is believed will yield more than sufficient to pay in full all the indebtedness of the Company;

2. And whereas, it would be difficult for the Company at this time to realize upon said assets unless an extension of time were granted in which for it to pay its existing indebtedness, and unless further moneys were raised to aid in carrying on the business of the Company;

Now this agreement witnesseth as follows:

1. The capital stock of the Company deposited hereunder shall immediately be transferred to the Trustees under a voting trust agreement.
2. All the present members of the Board of Directors and the Officers of the Company shall at once resign, and their successors shall be named by the Trustees named in the Voting Trust Agreement to serve until their successors shall be duly qualified and elected.
3. The Board of Directors shall have the sole power to appoint and remove at will, all the officers of the Company, including any general manager, and to manage and direct the Company in the conduct of its business; they shall have the sole and exclusive right and power to carry on the business in such manner and for such time as they may see fit, and at any time to discontinue, temporarily or permanently, the whole or any portion thereof, as they may see fit, and, in their discretion, to resume any portion of the business which they may have temporarily discontinued; they shall have the sole and exclusive right and power, at any time, to wind up and liquidate the whole or any portion of the business, to sell the whole or any part of the assets and to distribute the net proceeds pro rata, among its creditors, whenever in their judgment they may deem such action to be for the best interests of the Creditors and Stockholders.
4. The Company shall execute and deliver to each of the Creditors who become parties hereto its promissory note in a sum equal to the amount of his claim. Each note shall bear interest at the rate of 6 per cent per annum and shall be payable six months after the date thereof. Each of said creditors agrees that his note shall at maturity be renewable by the Company for another six months, and at maturity of such renewal the note shall be further renewable for successive periods of six months, for not exceeding two years.

In return for these notes, each creditor shall deliver to the Company for cancellation all the obligations of the Company which he holds.

5. All money borrowed by the Company, with interest thereon, and all merchandise purchased by it, together with all costs, charges, and expenses of every kind incurred by it incident to this agreement, shall have priority and precedence in payment out of the assets of the Company, so that in any distribution of the assets, these claims shall be fully met and paid before the said assets are applied to the payment of claims of any of the parties to this agreement existing prior to the execution hereof.
6. If, at any time, in the opinion of the Board of Directors so named by the Committee elected by the signatories of this agreement, the best interests of the Creditors would be served by a sale of all of the assets and business, or by dissolution of the Company, they may take such action.

Management by the Creditors' Committee

These represent the important clauses of a typical creditors' realization agreement. After favorable action of the creditors' committee, this agreement is signed. The committee is either elected, or preferably named in the resolution (sometimes called a "handpicked" committee). The stock is turned over to this committee, the directors and officers resign, new directors are elected, and, as a rule, a new manager is appointed, usually to act in connection with the existing management, if, as already stated, the integrity of the present manager has not been called into question.

The business then goes on as before. If new cash is required—and that is almost always necessary—banks, which are generally parties to the agreement, advance the money. Their security is a prior claim upon all the assets of the business, including the money they advance. The control and management, being in the hands of the creditors, are ordinarily dominated by the banks, which can therefore safely and properly advance such money as the business may need.

The advice and assistance of the creditors is at the disposal of the committee; especially when these creditors are bankers, it is of great value. The mistakes which led to the situation which made the signing of the agreement necessary are corrected. Unwise business policies are abandoned; sound methods of management are introduced; and, with ample capital and assured credit, the business is started on the road to recovery.

Contrast with Old Methods

A greater contrast to the method provided by law for the conduct of insolvent concerns than is presented by the operation of a creditors' realization agreement can hardly be imagined. The law offers, first, receivership, and second, bankruptcy. Bankruptcy often follows a receivership. Under a receivership, the court takes the property into its custody, appointing some person, either a representative of the creditors, or, in rural jurisdictions, a friend of the court, to administer the court's responsibilities. The receiver has, as a rule, no acquaintance with the business. He proceeds with great caution. He conceives his obligation to be that of conserving the assets, and he nearly always errs on the side of conservatism.

Under the receiver's administration, the business is likely to stand still or decline. While a receiver may obtain credit because his obligations are first lien on the assets, he is reluctant to incur such obligations, because he must explain their necessity to the court and obtain authority to incur debt. He usually proceeds in a cautious and halting fashion, interested only in the preservation of the business, and not its upbuilding. At the end of a receivership, if the creditors have agreed on a plan of reorganization, the business is handed over to a new company, or in rare cases, to the old company, and the creditors accept stock or obligations of the new company in payment of their claim. Instead of creditors, they are apt to become

partners in the business, which is the last thing they wish to do. Receivership is frequently interrupted by bankruptcy proceedings, and there the case is hopeless.

While the trustee in bankruptcy may be ready to continue the business, it is unusual for him to do so. He hurries the assets to a sale, public or private, scattering the organization, destroying the goodwill, and breaking up the entire business structure on his way. His expenses, the expenses of his attorneys, and the expenses of the sale, leave but little for the creditors.

It is a singular and convincing proof of the common sense of business men that so simple and effective a method of saving sound concerns which have, for one reason or another, become involved in difficulties, has been worked out and put into such general operation through the use of the creditors' realization agreement.

Reorganization by Creditors' Committee

Operation by creditors' agreement is usually limited to small concerns whose creditors are few, unsecured, and easily called together. The capital structure of such a business is usually simple, either a partnership or a private corporation, whose stock, generally of one class, is closely held, and which is managed by its owners. The problem confronting a creditors' committee is usually one of overextension of short term credit. The creditors' committee may, it is true, recommend, as a final solution, some form of funding obligations with additional contributions from owners. For example, in 1925, the creditor-selected board of directors of the Standard Tank Car Company, after operating the business for a year, proposed a plan of reorganization involving new money from stockholders, the refunding of certain debts, and part-payment and extension of others. There is no reason why any creditors' committee should not insist upon a thoroughgoing capital reorganization as an alternative to

forced sale or liquidation. Rather than take the chance of a forced sale, which might destroy their interest, owners or stockholders will agree to any fair plan which will give them the opportunity to carry on. As a rule, however, the outcome of a creditors' committee control is either the return of the business to its owners, or a liquidation.

Voluntary Reorganization without Foreclosure

We come finally to voluntary reorganization without foreclosure, although a friendly receivership, controlled by the company's organization, is sometimes necessary for protection against recalcitrant creditors. Here the situation is essentially the same as that pictured in the discussion of reorganization in the preceding chapter—bondholders, some secured by mortgage and some by the general credit of the company, short term debt—bank loans and trade creditors, preferred stock and common stock. The company cannot pay maturing obligations, frequently it is not earning interest on these obligations. Banks refuse further credit and press for reduction of loans. Trade creditors are also importunate and uneasy. Under former practice, a receivership and reorganization on familiar lines would be indicated. But if the creditors and stockholders will face the situation, provided only that the business, aside from its unmanageable debts, is sound, they can work out their difficulties.

Basis of Value the Earnings of the Property

It is first necessary to recognize that the property is worth no more than the capitalized value of its earnings. A forced sale will destroy all the equity of the stockholders, and will cut deeply into the value upon which creditors have depended to secure their loans. There is no one to buy the property save some company in the same line of business, and their terms are certain to be hard. Holders of underlying bonds may recover their money,

but unsecured creditors will join the stockholders in complete loss. Cash must be provided, and while stockholders may be persuaded, after a receivership, to pay assessments and take junior securities, this cannot be counted on, except in the limited field of public utilities. To the extent that stockholders do not participate, junior creditors must advance the necessary money and go into the sugar, or silk, or cotton yarn business. Beyond this, a long receivership, as we have seen, is expensive and demoralizing. Earnings are the basis of a successful reorganization plan and a receivership reduces earnings. Provided only that the different interests concerned can unite in committees, a voluntary reorganization, without foreclosure, is the line of action indicated.

Proposed Reorganization of Cuba Cane Sugar Company

A typical situation is set out in a letter sent to security holders of the Cuba Cane Sugar Company in July, 1929. The situation of the company is set out as follows:

> Low prices for raw sugar, restriction of output by Governmental decree, and the generally unfavorable conditions surrounding the Cuban sugar industry during the past three years have adversely affected the operation and earnings of the corporation—net earnings for the fiscal year ended September 30, 1929, are estimated at $3,000,000 before depreciation, interest and income taxes, as compared with annual interest charges on the present funded debt of approximately $2,600,000 and an annual depreciation appropriation of $750,000.
>
> This unsatisfactory situation, which holds out no prospect for improvement in time to relieve the corporation's present financial difficulties, and which is further accentuated by the proposal for an increase in the tariff rate on Cuban raw sugar, makes it impossible for the corporation to provide funds for the payment of its maturing debentures on January 1, 1930.
>
> A receivership, unless co-operation was assured on the part of all security holders to carry through a plan of reorganization, would involve long, protracted and costly proceedings in the Cuban and domestic courts. The location of the corporation's

property and business in Cuba, which has no law of equity receivership, might, in the event of such a receivership, result in bankruptcy proceedings in Cuba, destruction of property values, and cause entire cessation of the corporation's business for a period of time which would be disastrous. Furthermore, such a receivership might extend for a period of years during which time the holders of the existing debentures would probably be deprived of interest or any return on their investment.

Under such a receivership, the position of the preferred stockholder would always be uncertain, and their equity in the properties would be seriously jeopardized and possibly entirely wiped out. The satisfaction of the prior claims of the funded debt and of the preferred stock upon which there are unpaid accumulated dividends of 57¾% or $28,875,000 would almost certainly entirely eliminate the equity of the common stockholders in the properties.

The plan of reorganization provides for an adequate extension of the maturity debt and contemplates the possibility that the corporation will have to carry on its operations during some further period of depression in the industry. If the plan is consummated, the corporation has assurance satisfactory to the directors of being able to borrow from its banks the amount necessary to continue operations through the season 1929-30 and following seasons unless unforeseen and extraordinary adverse conditions arise in the industry.

Consummation of the plan will enable the corporation or its successor company to pay the semi-annual interest of 3½% and 4% respectively due January 1, 1930 on the maturing debentures, whereas, in the event of failure of the plan, the corporation will be obliged to default upon the maturing principal of the debentures and of the interest as well.

The provisions of the plan were as follows:

1. An exchange of the 7 per cent and 8 per cent debentures for new 6 per cent debentures, interest payable only as earned for five years but to be cumulative.

2. The transfer to the debenture holders of 25 per cent of the stock of the new corporation which is to acquire the property of the old company.

3. The sale at $5.00 per share for the preferred and $7.60 per share for the common to existing stockholders of 1½ shares of new common stock for the preferred stock of the old company,

and of ⅛ share of new common stock for the common stock of the old company. Option warrants exercisable for ten years to subscribe for new common stock at $20 a share were also offered.

4. Underlying mortgage bonds carrying $660,000 of annual interest remained undisturbed.

The plan contemplated issuing to present stockholders 77 per cent of the common stock of the successor company in exchange for $4,500,000 in cash, and the reduction for 5 years in compulsory interest charges of $1,900,000 annually.

This plan was presented by four committees, the general reorganization committee, and committees representing debenture bondholders and preferred and common stock. It was found impossible to carry it into operation because of the failure of 28 per cent of the debenture bondholders to assent to the plan. This was apparently due to apathy and difficulty of communicating with the bondholders rather than to any active dissent or opposition. The reorganization committee announced on September 11, 1929, in stating that a receivership was inevitable, that they would attempt to carry out the plan even in receivership and this was eventually accomplished. The preliminary work of the reorganization had already been done, and debenture bondholders hitherto nonassenting were given a further opportunity to deposit their securities.

The plan of voluntary reorganization of the Cuban American Sugar Company was evidently desirable from the standpoint of every interest concerned. It left undisturbed those bonds whose security was good. It gave the debenture bondholders the entire net earnings of the company for five years, which was all they could expect in any event, and it gave them 25 per cent of the stock for their risk of failing to receive interest. It gave the stockholders the opportunity to continue 77 per cent of their interest in the properties.

Summary and Conclusion

The attempt of the bankers to make unnecessary a reorganization in the regular form of the Cuban Cane Sugar Company, unsuccessful though it was, shows the prevailing trend in these settlements. It shows a recognition that, irrespective of legal forms, of conveyances of property to trustees, of strong guarantees of interest, of all the well-devised machinery for enforcing the payment of debt, the basis of security is value, and the basis of value is net earnings. No creditor can get out of a property a greater sum than the property will yield, and, unless he has been foresighted enough to protect his claim by the physical possession of saleable merchandise or securities with a margin over the loan sufficient to take up the loss inseparable from a forced sale, the creditor must be content to take his claim in securities, whose value will depend on the future earnings of the company.

CHAPTER XLVIII

THE REORGANIZATION OF INSOLVENT CORPORATIONS

The reorganization of an insolvent corporation is a settlement of the claims of the different parties in interest on such a basis that the property can be released by the court and again managed as a going concern. It is attempted only in case the prospects of the business indicate that a reorganization will be successful, otherwise, the assets must be sold, and the business ended.

Necessity of Speedy Reorganization

As soon as possible after the receivers have been appointed, efforts are set in motion looking to the rehabilitation of the bankrupt corporation. The interests of all concerned point to a speedy settlement of its difficulties. As long as a corporation remains in the hands of the receiver, the values of its securities are low, owing to its uncertain future. Those persons whose capital is invested in these bonds and stocks are unable to find purchasers for their investments at fair prices, or to make loans upon these securities with financial institutions. Banks and trust companies which have taken these securities as collateral are, for the same reason, unable to dispose of the collateral except at a loss, even if they consider it expedient to further complicate an already difficult situation by such a drastic action. All interests are, therefore, equally concerned to reach a speedy reorganization of a bankrupt company. Unless an attempt is made to treat some interest unfairly, the operation is quickly concluded and a settlement is reached which preserves the integrity of the

business, and equitably apportions among the different claimants the losses which have been sustained. The courts have also assumed the necessity of speedy reorganization, and have sometimes gone so far as to recommend to creditors and stockholders that they hasten to arrive at a settlement of their difficulties in order that the receivers may be discharged.

Objects of Reorganization

The objects of reorganization are as follows:

1. To pay off or fund the floating debt.
2. To provide funds for betterments and working capital and to arrange for future capital.
3. To reduce fixed charges within a conservative estimate of net earnings.

Cash Requirements Indicated

Reorganization, in almost all cases, requires that a large amount of cash should be provided. This money is required to pay certain kinds of current debt, to complete an unfinished plant, or for the reconstruction and repair of property whose physical condition has been allowed to deteriorate. Taking up first the floating debt which must be provided for, we find this usually divided into receiver's certificates and secured loans. The receiver's certificates, as already explained, constitute prior liens on the property, and must be paid in cash when due. We have also seen in the discussion of the issue of short term obligations, that these are now almost invariably secured by a large margin of collateral. These notes have been usually taken by banks, trust companies, or large individual capitalists. The collateral back of them consists either of bonds authorized under existing mortgages, or of securities owned by the corporation representing the control of properties which are indispensable to it. The holders of such notes are in a position to demand payment in full. Unless paid,

they can sell their collateral and seriously embarrass those who are endeavoring to reorganize the company.

The physical condition of a bankrupt property is usually bad. In some cases the original financial plan has not provided sufficient funds to complete the plant which must be finished before it is of any value, and the property of going concerns has often suffered severely during the period when directors were struggling to maintain earnings by reducing expenses, before receivers were appointed. The receiver, as we have seen, may do much to improve the physical condition of the property, but he is not likely to provide all the money necessary.

Reduction of Fixed Charges

The reorganization plan should provide that the net earnings of the company, on a minimum estimate, should insure a safe margin above fixed charges. If the receivership has been due to the maturity of debt at a time when financing was not possible, a reduction of fixed charges may not be necessary. In the great majority of cases, however, adversity has disclosed the fact that fixed charges are too heavy for the earnings of the company, and opportunity is taken in the reorganization to reduce them. Unless this is done, at the next season of trial, net earnings may again fall below charges, and another surgical operation on the capitalization of the company will become necessary. Until the present depression, although fixed charges were drastically reduced in well-considered reorganization plans, some allowance was usually made for a revival of business. The collapse of earnings during the last three years, however, has radically changed reorganization practice. Minimum, or present, earnings are now taken as the basis of recommended fixed charges, and in most cases fixed charges, aside from interest on small issues of mortgage bonds made to obtain the indispensable "starting money," are made contingent upon earnings. Formerly

reorganization committees operated in an atmosphere of hope. Today they should begin with the hymn, "Plunged in a gulf of dark despair, what shall my helpless soul redeem?" Reorganization plans are usually based upon an exhaustive analysis by the receivers of the company's past earning power, the causes of failure, assets and liabilities and probable cash requirements.

Formation of Committees

We see the objects of reorganization. How are these objects to be realized? The first step in carrying through a reorganization plan is usually the formation of committees to represent the owners of different classes of bonds. In some cases also committees are formed to represent stockholders. The purpose of forming committees is to secure united action on behalf of each interest concerned in the reorganization, and also to keep the various bonds and notes of the company from being thrown on the market and sacrificed. The formation of committees may not, it is true, be necessary. The receivers or the directors may themselves formulate a plan of reorganization, or they may appoint a committee to formulate such a plan to which they may afterwards invite the consent of the security holders. If the plan proves satisfactory, it may at once be put into effect. It is seldom, however, that such a quick method of settlement can be adopted. Holders of different classes of securities are unlikely to consent to any plan which they have had no hand in formulating.

Committees Self-Constituted

The method usually employed in the formation of these committees is for individual bondholders to constitute themselves or their representatives a committee to take charge of the particular class of securities, and to invite the creditors or stockholders to signify their consent to this arrangement by depositing their securities with some

disinterested agent, a trust company, or bank. If a majority of the securities are thus deposited, the self-constituted committee becomes representative, and is recognized as such by the courts.

The powers of these committees are very broad. The committee is vested with the legal title to all securities deposited with them, and is authorized to act in all respects in behalf of the depositors as though they were directors of a corporation elected for the purpose. The committee has all the powers of owners of the securities, and full discretion as to the methods of carrying out the agreement. The committee is authorized to institute suits or to intervene in suits, to sell the deposited securities under certain conditions, to employ agents, attorneys, and counsel, to purchase property at foreclosure sale, and to borrow money on the security of the bonds or stocks deposited with them. The principal duty of the committee is to prepare a plan of reorganization which, after reasonable notice has been given to the depositors under the agreement with the committee, and failing objection on their part, signified by the withdrawal of their securities, is held to be binding upon them. The depositors assume liability for the necessary expenses of the committee up to a certain amount on each bond or share of stock deposited. It is usually provided that the committee may at any time terminate the agreement, and also allow the bondholders to terminate it by a certain vote. The effect of the deposit of securities is to constitute the members of the committee trustees for the depositors; to form, as it were, a temporary corporation for the attainment of certain objects.

The Reorganization Plan

The committee, after conference with bankers, whose assistance usually is indispensable to the consummation of a plan of reorganization, after examining the condition of the property, its assets and liabilities, its record of earn-

ings, and also after conferring with large shareholders and creditors, announce a plan of reorganization. This plan they may either announce on behalf of themselves or through bankers or individuals whom they may designate as reorganization managers. For example, J. P. Morgan & Company on June 1, 1909, made the following announcement to the holders of debenture stock, Preferred stock A, Preferred stock B, and Common stock of the Chicago Great Western Railway Company:

> At the request of the London Committee for Debenture Stock of the New York Committee for Debenture Stock, and of the New York Committee for Preferred Stock A, Preferred Stock B, and Common Stock, the undersigned have consented to act as Reorganization Managers in carrying out a Plan for the Reorganization of the Chicago Great Western Railway Company.

So far as the securities affected by the plan have been lodged with a committee, the assent of the committee to the plan is held to be binding on the depositing bond or stockholders unless they signify their dissent within the time named in the agreement with the committee, by withdrawing their securities. Holders of securities which have not been deposited are given a certain time to consent to the plan. This time limit is often extended, but unless the deposits are made within the time stipulated by the committee, nonassenting bond- or stockholders are held to be excluded from the benefits of the plan and must take their chances like anyone else in a foreclosure sale.

Reorganization without Foreclosure

Coming now to the consideration of the reorganization plan, we find that the property may be either returned to its former owner, or it may be transferred under foreclosure sale to a new company. It sometimes happens that there are distinct advantages in reorganization without foreclosure sale, employing the same company which controlled the property before the default. Companies may

have valuable privileges in the form of exemption from taxation, which a new corporation would lose. In such cases, the reorganization plan usually contemplates the return of the property to the existing company. The Philadelphia & Reading Railroad Company, for example, went through two reorganizations because its charter privileges were too valuable to be surrendered.

Reorganization with Foreclosure

The usual method is, however, to organize a new company in which is vested after foreclosure sale such portions of the property of the old company as it is thought wise to retain, and which either assumes the obligations of the old company in their original form, or secures such modifications and reductions in their amount as are necessary to the success of the new company. The advantage of this method is that, by the foreclosure sale, all the rights of nonassenting security holders are extinguished, and the new company is placed in complete control of the property which it desires. It is customary, even when a new company is employed, to use a name closely resembling that of the old company. A rail*road* company, for example, will be succeeded by a rail*way* company, and *vice versa.*

Protective Committee Carries Out the Plan of Reorganization

A new company has been in the meantime organized, which issues certain securities with which it buys the property from the reorganization committee. The committee then exchanges these securities for the old securities of the predecessor company. By the terms of this exchange the objects of reorganization are accomplished.

The method of placing the new company in possession of the property by the reorganization committee, is illustrated by an explanatory statement issued by the protec-

tion committee for the first mortgage bondholders of the Sears & Nichols Canning Company in April 1927.

Committee has formed the Sears & Nichols Corporation in Ohio. It is proposed to assign to this corporation the contracts which the committee has heretofore entered into for the acquisition of the several plants of the old company located in Ohio, the equipment and chattel property appurtenant thereto, together with the trade marks, labels, and the goodwill of the business formerly carried on by the old company. The committee will also assign and deliver to the new company the bonds which have been deposited with it, and will agree with the new company to procure the underwriting of $350,000 first mortgage bonds at par.

In consideration of the transfer to it of the deposited bonds, together with the committee's contracts for the acquisition of the above properties, and the procurement of the underwriting, the new corporation will issue and deliver to the committee 7,000 shares of its no par common stock, and an amount of bonds deposited with the committee. These bonds and shares of stock authorized by the new company are now, according to the plan of reorganization, distributed to those security holders of the old company who take part in the reorganization plan, and to the purchasers of the new bonds.

Simplification of Capital Structure

Advantage is usually taken of this opportunity to simplify the capitalization structure. Especially has this been done in reorganizations of large railway companies. The formation of a new company which issues its bonds and stock in exchange for the securities of a predecessor company, makes possible the concentration and simplification of the capitalization. The new capital set-up may unite branch line bonds, terminal bonds, bonds secured by first mortgages upon separate portions of the main lines, under large single issues which are more easily managed, better secured, and so of higher value than those which they replace. The property of the Northern Pacific Railroad Company before its last reorganization was owned by fifty-four corporations which had issued $380,000,000 of stocks

and bonds. A circular of the reorganization committee described the difficulties of the old capitalization structure as follows:

> As it now stands, the system, in its form of incorporation and capitalization, is a development without method or adequate preparation for growth. Scarcely any single security is complete in itself. The main line mortgage covers neither feeders nor terminals. The terminal mortgages may be bereft of their main line support. The branch line bonds are dependent upon the main line for interchange of business, and the main line owes a large part of its business to the branch lines.

The plan of reorganization of this company reduced the number of these obligations, and greatly simplified the capitalization of the company by subjecting the entire system to the lien of two bond issues, one following the other. Sinking fund provisions, which have proven embarrassing to the corporation, may also be eliminated. An adequate bond reserve may be provided under which, with proper restrictions, future issues of bonds for the capital needs of the company may be made. The company may also save in the exchange of securities by retiring high interest bonds issued on branch lines where the security is not perfect, with lower interest bonds secured by mortgage upon the entire property. All these methods of reorganizing the capital account have been fully explained. They are freely employed in the reorganization of bankrupt corporations, because the transfer of the property from one company to another furnishes an excellent opportunity for such readjustments.

Provision of the Necessary Money

A more important use is found for the securities of the new company in providing the cash required in the reorganization, and making the necessary reduction in fixed charges. In most reorganizations, as already observed, a large amount of cash must be provided. The cash requirements of the Baltimore & Ohio reorganization plan, for

example, in 1896, amounted to $36,092,000. The reorganization managers of the Erie had to provide $19,344,000. Recently, the Chicago, Milwaukee & St. Paul provided $70,000,000 in its reorganization. This cash is obtained by subscription to the bonds and stock of the new company.

Proposition to the Stockholders, Old and New Form

Efforts are first made to interest the stockholders who are invited to participate in the reorganization. To the committee in charge of the reorganization is presented this problem: "If we take over the property at a foreclosure sale, and exclude the former stockholders, it will be necessary for us to provide the cash required. The money can probably be raised, it is true, by the sale of first, or first and refunding mortgage bonds, but since one object of reorganization is to reduce rather than increase the debt of the company, it is desirable to keep down the new bonds issued to the lowest possible figure. The only practical alternative is to induce the stockholders of the bankrupt company to furnish the funds required."

The offer to subscribe to the securities of the new company is made to the stockholders in one of two forms. They may be told that their company has failed; it is unable to pay its debts; its creditors have liens upon all its properties. Unless the stockholders are prepared to furnish the money necessary to pay these debts, the property must be sold by the court and the stockholders will lose all chance to recover their loss. In the foreclosure sale, the various evidences of debt, no matter how much their interest may be in default, or how worthless they may be in the market, will count, as against any inferior lien, at 100 cents on the dollar. Therefore, if the stockholders desired to compete at the sale, they would be at a hopeless disadvantage, since it would be necessary for them to match, dollar for dollar, with cash, the various

bonds which will be presented as a means of payment by the creditors. The creditors, therefore, control the situation. They propose to organize a new company to take over the property of the bankrupt corporation, since they realize the necessity of keeping the property together.

The creditors, however, do not desire to take undue advantage of their position. They will give to the stockholders the privilege of joining with them in this new company. They make to the stockholders the following offer: to sell them preferred stock in the new company for, say, $20 per share, and common stock for $10 a share. "We have every reason," they say, "to believe that with the indebtedness paid, funded or reduced within a conservative estimate of earnings, and with good management, the new company will be more successful than the old. We are confident that if you purchase stock in the new company on the basis proposed, you will have no reason to regret your action."

Illustration: Proposition to Westinghouse Stockholders

This was the proposition which, in substance, was made to the stockholders of the Westinghouse Electric & Manufacturing Company, on April 8, 1908. The stockholder's committee of this company sent out a circular letter outlining a plan of reorganization in substance as follows: Certain bonds of the company were to remain undisturbed. The floating debt was in part to be converted into stock and in part funded into bonds and notes. The stockholders were to subscribe at par for $6,000,000 of new stock. The proposition to the stockholders was as follows:

The chief difficulty with the company and the principal cause of the receivership are found in the fact that, as the result of the rapid expansion of its business, too large a proportion of its investment is represented by debt. If a substantial reduction can be made in the debt by the sale of additional stock, it is believed that the receivership can be promptly terminated with every prospect of the company's entering upon a career of re-

newed prosperity. On this point the reorganization committee said:

"The committee believe that if the conduct of the business can promptly be restored to the stockholders under the direction of a strong board of directors, the company will continue to make substantial earnings. On the other hand, there can be no doubt that a continuation of the receivership for a considerable time, and a forced liquidation of the assets, would be disastrous to the creditors as well as to the stockholders."

The Merchandise Creditors' Committee have shown their confidence in the company and its future by undertaking to secure the exchange of, at least, $4,000,000 of the company's floating debt for "assenting stock," at par. They, however, impose the condition that the remaining $6,000,000 of the $10,000,000 of subscriptions required to terminate the receivership and place the company in a safe position shall be furnished by the stockholders. It is for the purpose of securing from stockholders subscription to this $6,000,000 of stock that the undersigned committee has been formed.

The holders of the preferred and common stock of the company are, therefore, asked to subscribe for "assenting stock" of the company at par, at the rate of at least one share of new stock for every four shares (or fraction thereof) of existing stock. Such subscriptions are to be payable in the following installments:

25 per cent on May 25, 1908,
20 " " " August 1, 1908,
20 " " " November 1, 1908,
20 " " " January 1, 1909,
15 " " " April 1, 1909.

The deferred payments are to bear interest at the rate of six per cent per annum, with the privilege to subscribers to pay their subscriptions in full at any time.

The Merchandise Creditors' plan cannot be carried into effect unless the stockholders protect themselves by subscribing pro rata for their shares of this new stock. If these subscriptions are not forthcoming, the inevitable result will be that the Readjustment Committee, which was organized for the protection of creditors, will be forced to reduce the debt of the company to judgment, bring about a forced sale of the property and its acquisition by a new corporation organized in the interest of creditors. Such a course would result in enormous loss which would fall chiefly upon the stockholders of the company. That loss can be avoided

only by the coöperation of stockholders in promptly subscribing for a sufficient amount of new stock to insure an early termination of the receivership.

The committee wish to lay special emphasis upon the fact that the success of this plan for saving the company for its stockholders requires the unanimous compliance of stockholders, however small their holdings, with this request for subscriptions. The ownership of the stock of the company is divided among about 4,000 stockholders, the average holding (excluding the holdings of the Security Investment Company and its president) being only about eighty-three shares (par value, $50). Most of the stock owned by the Security Investment Company has been pledged as collateral in comparatively small amounts with a large number of banks which are being asked to subscribe to the new stock in proportion to their respective holdings.

Subscriptions to the stock of the Westinghouse Electric & Manufacturing Company were largely influenced by this express threat that failure to procure the required amount would subject the stockholders to the danger of foreclosure sale.

The situation of the Westinghouse Electric & Manufacturing Company was, however, different from that of most bankrupt corporations. With this company, the trouble was chiefly due to inadequate working capital which resulted in an excessive amount of funded debt calling for the payment of both principal and interest at a time when financing could not be done. The reorganization of the Westinghouse Company required nothing more than the funding of this current debt on which the company was abundantly able to pay interest. The stockholders' interest in the property was plain. Even during the receivership, the stock never fell below $8.75 (par $50), which indicated a considerable margin of value after the debts were paid.

Stockholders' "Assessment" in Reorganization

In most cases, however, bankruptcy has been due to the failure of the company to earn interest on its funded

debt. If the company cannot earn enough to pay interest on its bonds, then its property is not worth the amount of its debts, and there is nothing left for the stockholders. Their interest in the property has, long before the reorganization, entirely disappeared. They have already been "wiped out." To stockholders in this situation a proposition that they should subscribe to stock in a new company at the rate of $10, $15, or $20 per share might be unattractive. The response of many stockholders to such a proposition would be an emphatic negative. They would inform the reorganization committee that they did not propose to throw good money after bad; that they did not care to make a new investment in the company with which they had fared so badly; that, although the claims of the reorganization committee as to the future of the company might be borne out by results, for their part, they would prefer to await the materialization of those results, rather than risk any more of their money in a venture which had proven so disastrous.

When money is to be raised from stockholders where there is no equity in the property which they would naturally desire to retain, the proposition until recent years has been presented to them in a different form. Instead of being invited to subscribe to stock of a new company, the offer takes the form of a proposition that they should pay an "assessment" upon their stock, "go through the reorganization," and recover, in the increasing profits of the company, the losses which they have sustained. In the Chicago & Great Western reorganization plan, for example, the conditions of participation in the plan were set forth to the stockholders as follows:

> Participation under the plan by holders of the several classes of stock is dependent on the deposit of the stock certificates with the undersigned, within the period limited therefor. The plan embraces only the stocks so deposited. No certificate for any stock of any class will be received on deposit unless in negotiable form.

Debenture Stock and Preferred Stock A are to be received without payment as stated in the Plan.

Depositors of Preferred Stock B must pay $15 in respect of each share of such Preferred Stock B so deposited, and will be entitled to obtain from the Syndicate mentioned in the Plan, Preferred Stock voting trust certificates of the New Company when issued, equal at par to such payment, and also Common Stock voting trust certificates of the New Company, when issued, to an aggregate amount at par equal to sixty per cent of the par value of their present Preferred Stock B so deposited.

Depositors of Common Stock must pay $15 in respect of each share of such Common Stock so deposited, and will be entitled to obtain from the Syndicate, hereinafter mentioned, Preferred Stock voting trust certificates of the New Company, when issued, equal at par to such payment, and also Common Stock voting trust certificates of the New Company, when issued, to an aggregate amount at par equal to forty per cent of the par value of their present Common Stock so deposited.

Criticism of "Assessment" Form of Proposal

A careful examination of this statement will show the difference in form, although not, as we shall see, in substance, between the proposition of an assessment and the proposition of a new subscription. The payments of cash are to be made *in respect of* and *in connection with* the deposit of common and preferred stock under the plan. The stockholder is informed that, if he will make a contribution on account of his present stockholdings, he will be allowed to receive stock in the new company. He does not, on the face of things, pay for the stock in the new company—that is given him in exchange for his old stock. He pays an "assessment" on his old stock, and, on account of this "assessment," he becomes entitled to receive new stock.

"Assessment" a Device to Persuade Reluctant Stockholders

The proposition to the stockholders of the old company that they should subscribe to stock of the new company is

put something as follows when a subscription is styled an assessment: "Your company is bankrupt; its creditors are in position to take the property, and they will take the property unless a certain amount of cash is raised. The creditors do not, however, desire to exclude stockholders from participation in the reorganization, but they must look to the stockholders to furnish the necessary money by paying a small assessment on the par value of their present holdings. If you will pay this assessment, you will be allowed to exchange your certificates of stock in the old company for a certain number of shares in the new company, and you will receive stock in addition to the amount of the assessment."

This proposition, it is evident, is precisely similar to the one first mentioned. It is an offer of stock in a new company. But, while many stockholders in an insolvent and discredited corporation will not accept a proposition when presented to them as a subscription, when designated as an "assessment" on the stock which they already own, they have very generally accepted the proposition of reorganization committees, have paid their assessments, and received stock in the new concern. The second form of the subscription proposition appeals to the stockholders while the first does not. The "assessment" proposition presents to the stockholder the idea of an unfinished transaction. He hopes that, with one more effort, the payment of $10 or $15 per share, he can recover from the company the money which he has lost. The "assessment" proposition offers him apparently the opportunity to recoup himself, to justify to himself his judgment of the value of the stock in which, up to the present time, he has been so grievously disappointed. By employing this method of calling a subscription to stock in a new company an "assessment" on stock in an old company, reorganization committees have been able to obtain large amounts of money from stockholders, whereas if they had asked the

stockholders to subscribe to stock in a new company, they would probably have been much less successful.

Underwriting Assessments

The assessments of stockholders are usually underwritten, a syndicate being organized to pay the "assessments," and to take the stock of those holders who do not participate in the plan. The commission paid to this syndicate varies, of course, with the risk which they assume, but the existence of the syndicate brings pressure to bear upon the stockholder by assuring him that others stand ready to accept apparently the same terms which are offered to him. In 1895, for example, the final Atchison reorganization plan announced the following:

"A contract has been made with a syndicate to furnish an amount of money equal to the assessments of *nonassenting* or *defaulting stockholders,* and such syndicate, by such payment, shall take the place of the *nonassenting* or *defaulting stockholders,* and shall be entitled to receive the new common and preferred stock, which *nonassenting* or *defaulting stockholders*[1] would have been entitled to receive if they had deposited their stock and paid their assessment in full." The syndicate may actually purchase the new stock and offer it to those stockholders who pay their assessments, thus making an exceptionally forcible appeal. By employing this method of approach, reorganization managers, especially in railway reorganizations, have been remarkably successful in paying off most of the floating debt without resorting to the sale of bonds.

The difference between a reorganization "assessment" and a subscription to new stock is only in form; in substance they are the same thing. When stock is full paid, it is not liable to any assessment. A stockholder may have only paid $20 a share for his full paid stock, but the cor-

[1] Italics are the author's.

poration has no right to demand any more from him. Any further payments to the company are at his own pleasure. And yet, so imperfect is the knowledge possessed by the average stockholder of his rights and obligations, that he is apt to feel, when an assessment proposition is made to him, that there is an obligation to pay the assessment and take the new stock. A reorganization assessment is looked upon as compulsory. Stockholders are informed that if they refuse to pay they are "debarred from all participation in the reorganization," that they "lose all chance to recoup their loss from their share in subsequent profits."

Change from Assessment to Subscription

An examination of a large number of reorganization plans, however, shows that "assessments" since about 1907 have been generally stated in their true light as subscriptions. For example, the reorganization plan of the Newhouse Mines & Smelters, 1909, states that:

> In order to furnish the necessary working capital for development, payment of debts, expenses of foreclosure, reorganization and underwriting, the Stockholders will be required to subscribe to the capital stock of the new company and to pay one dollar for every share so subscribed. Every Stockholder so subscribing will receive one share of common stock of the New Company for each share now held by him.

It is impossible to approve the indirect method of raising money from stockholders. The stockholder owes nothing to the reorganization managers, or to the creditors. If they secure his participation in the new company, they should make him an offer of a more attractive investment than he can obtain elsewhere. Unless the payment of an assessment on stock of a bankrupt corporation gives the stockholder, who desires to continue his interest in the company, the new stock at a lower figure than that at which he can purchase it in the open market, he

should allow the creditors to advance the money necessary, and buy the stock after the reorganization has been completed. While by adopting such a course he may be "debarred from all participation in the reorganization," he does not "lose all chance to recoup his losses from his share in the subsequent prosperity." Dr. Stuart Daggett, in his book *Railroad Reorganization,* gives a list of eight reorganizations in which the common stock was assessed, together with the price of the stock one month after reorganization, and six months after reorganization. In every case the stock could have been purchased in the open market directly after the reorganization at a lower price than it was purchased from the reorganization managers. It is desirable that stockholders should coöperate in making the reorganization plan a success, but the proposition should be presented to them in its true light, and not under the guise of an obligation or a necessity.

"Assessments" Now Stated as Subscriptions

Reorganizations now generally state the "assessment" on stockholders in its proper light. For example, a digest of the plan of reorganization of the Chicago, Milwaukee & St. Paul in 1926, has the following:

> The $70,000,000 cash requirements to effect the reorganization will be met by payments of $28 per share by the holders of preferred stock and $32 per share by holders of common stock, for which only $106,888,980 of bonds will be issued. This is not a flat assessment, because for each share of the preferred stock, the holder will receive $24 principal amount of new 50 year 5% gold mortgage bonds and one share of new preferred stock. The depositor of common stock will receive $28 principal amount of new 50 year 5% gold mortgage bonds and one share of new common stock. These bonds, it is indicated, will have a market value of about 80%. This will mean a net assessment of approximately $9 per share.

The substance of this transaction is that the common stockholders, for example, in return for $32 receive $28

of new bonds, worth $22.40, and one share of common stock which cost them $9.60 per share. Under the old form of flat assessment he would have paid, perhaps, $10 per share. For a share of common stock the cost is about the same, but the statement corresponds to the fact.

There is no implied criticism of "nonassenting or defaulting stockholders." The stockholder is offered a bond investment at a price somewhat above the probable market price. The difference is made up by a bonus in new stock which offsets the loss on the bonds. The stockholder desiring to continue his interest in the new company must consider whether he can buy the new stock at a lower price after the reorganization than the net price at which a combination of stock and bond offers him the opportunity to purchase the stock. In the present case the market price of the common stock opened somewhat below the "assessment price," and the market price of the preferred considerably above the assessment price.

It must be recognized, however, that the trait of human nature which makes any player reluctant to leave a game in which he is a loser, is the motivating force in all stockholders' contributions to reorganization. If the stockholder in a company whose property is sold at foreclosure does not participate in the reorganization by subscribing to new bonds and taking new stock as a bonus with his subscription, he is definitely out of the picture, and his loss is, in his mind, total. If he pays his assessment, he continues his interest. He is still a stockholder in the Milwaukee & St. Paul. He can still hope and indulge himself in the pleasures of anticipation. In no other way can the general participation of stockholders in reorganization be explained.

As a matter of fact, the modern method of collecting from the stockholders by selling them bonds and giving new stock as a bonus sometimes is more expensive, though more ingenuous than the old method of "assessment." The

holder of 100 shares of Milwaukee & St. Paul on the old plan might have paid $1,000 for his new stock. In the plan adopted, he paid $2,800. It is true that he received a bond for his assessment, but he did not want bonds. He bought bonds so that he could get new stock. From the standpoint of bondholders the new method is much better. They must make fewer sacrifices in interest, and provide less money than in the old days, when $5 or $10 a share was the best that could be expected from the stockholders.

Offer to Stockholders More Liberal in Reorganization without Foreclosure

The offer to stockholders, if foreclosure is not involved in the reorganization plan, is usually more liberal than when the threat of foreclosure can be issued to induce subscriptions. If the method of foreclosure is not to be employed, then the stockholders must be persuaded into the subscription by an attractive offer. The adjustment plan of the Seaboard Air Line Railway, which was carried through without foreclosure, provided the cash required by the sale of $18,000,000 of par value of cumulative 5 per cent income bonds, called adjustment bonds. These were offered for subscription to stockholders at 70 per cent of their par value to the extent of 30 per cent of the par value of their existing holdings. A syndicate was organized which, for a commission of 5 per cent on the par value of $18,000,000 of bonds, offered to the stockholders, guaranteed to purchase at this price any bonds that might not be subscribed and paid for by the stockholders. In this case there was no pressure put upon the stockholders to furnish any capital to the company. An attractive offer was made to them, and their acceptance of the offer was guaranteed by responsible bankers. Whether they subscribed or not, so far as the provision of cash was concerned, the success of the plan was assured.

Conditions When Creditors Must Provide Necessary Funds

If, or to the extent that stockholders will not advance money, the creditors must provide the funds required by subscribing to the securities of the new company. The creditors of a bankrupt company are potentially in the position of owners. They can obtain the property at a foreclosure sale, and if they cannot persuade or coerce the stockholders into advancing the money necessary for its rehabilitation, they will be obliged to take over the property, and themselves provide the necessary funds. Eliminating the stockholders, we have now to consider the methods by which creditors finance the cash requirements of a reorganization. Several conditions may be presented. There may be only one class of creditors, the holders of mortgage bonds. The company issuing these bonds has defaulted, and receivers have been appointed. These receivers have made certain expenditures for the benefit of the property, and certain other expenditures are necessary. The stockholders will advance no more money. As the reorganization committee of the Arnold Print Works stated in their announcement of a plan of reorganization:

> Reorganization with fresh capital contributed by the present stockholders is impracticable, as nearly all the stock is owned by Messrs. Houghton & Gallup, and apart from their interest in this stock they are now without substantial means.

The creditors in such a situation must depend upon themselves. They organize a new company to take over the property, thereby extinguishing all rights of stockholders and any minor claims of current indebtedness which may be outstanding. They capitalize this new company according to the exigencies of the situation. They may subject its property to the lien of a first mortgage securing bonds which they may either take themselves or sell to bankers, obtaining in this manner all necessary funds, or they may subscribe to the stock of a new com-

pany, placing no funded debt upon it. The property is at their disposal; they can use it to support the credit of the company as it may be necessary. If they advance the required funds themselves, they may arrange the capitalization of the new company in any way they see fit. If, however, they sell the securities to outsiders, they must consult the wishes of the subscribers.

First Mortgage Bondholders May Subordinate Liens

A case in point came under the writer's observation. A water-power company had underestimated the cost of a power and transmission plant. When the plant was little more than half completed, funds were exhausted. Receivers were appointed and the bondholders eventually bought in the plant at a foreclosure sale, eliminating the stock interest. It was now necessary to provide funds to complete the plant. The following plan, after prolonged negotiations, was presented to the bondholders. A new company should be organized to take over the plant. This company was to issue first mortgage 5 per cent bonds to an amount sufficient to complete the plant, and certain of the bonds were to be held in reserve for extensions. The old bondholders were to receive noncumulative preferred stock for their bonds, and the new bonds were to carry with them all the common stock of the company as a bonus. The owners of the plant were offered the privilege of subscribing to the new bonds, and receiving their pro rata share of the common stock. The subscriptions to the bonds were guaranteed by a finance company, which undertook, for a commission, to take the bonds of nonsubscribing owners, and receive their share of the bonus of common stock.

When Floating Debt Creditors Control the Reorganization

Another condition may arise; there may be secured creditors and unsecured creditors, commonly known as

floating debt creditors. We have already seen that when floating debt is amply secured by collateral, the reorganization plan must provide for its payment. It frequently happens, however, that the floating debt is unsecured. The Westinghouse Electric & Manufacturing Company at the time of its failure owed $5,000,000 for merchandise, and $8,000,000 to banks, for all of which there was no special security. In such a case, the holders of the floating debt, if the amount is large, in order to save something from the wreck, must advance the money required to put the company on its feet. They cannot ask the bondholders to make sacrifices, because, if the bondholders advance the necessary money, they may insist on retaining the stock of the new company. As for their own claims, the floating debt creditors, in case they manage the reorganization and provide the necessary funds, and in case, also, they do not disturb the position of the bondholders and safeguard the bondholders' interests in the reorganization, may arrange the capitalization of the new company as they please. In the Westinghouse reorganization, for example, already referred to, where the stockholders advanced the necessary funds, the holders of the company's notes, for 50 per cent of their claims, received convertible 5 per cent debenture bonds of the company which were in its treasury, and for the other 50 per cent of their claims, fifteen-year 5 per cent notes of the company bearing 5 per cent interest. As for the banks, if they objected to waiting so long for repayment, they were offered the privilege of taking amounts equal to 30 per cent of their claims in serial bonds due in four, five, and six years, on condition that, for the balance of the 50 per cent, they should accept stock of the company at par. In this case the floating debt creditors were able to negotiate successfully with the stockholders, on account of the large equity in the property. If, however, the stockholders had not advanced the necessary funds, it would have been necessary for the holders of the floating

debt themselves to subscribe to a sufficient amount of stock in the new company to provide the cash required, taking in addition stock for their own claims, and eliminating the stockholders.

Division of Burdens between Bondholders and Floating Debt Creditors

Occasions may arise where the bondholders and the floating debt creditors, when no money can be obtained from stockholders, divide the burdens of the reorganization between them, and partition the stock of the company in return for their cash advances. Even if the bondholders are obliged to take charge of the reorganization, and arrange for the financing, they may not eliminate the floating debt creditors, on account of special reasons. It may be possible, for example, to arrange with some outside company to guarantee an issue of second mortgage bonds in return for the common stock. In such a case there would probably be no objection to the floating debt creditors receiving preferred stock in the reorganization plan without cash advances. As a rule, however, if the general creditors do not subscribe, and if suitable arrangements cannot be made with outside interests, then the bondholders must provide the money. They will usually take the stock of the new company, eliminating general creditors of the old company along with its stockholders.

Apportionment of Burdens between Various Classes of Creditors

A further complication enters when there are several classes of bondholders, as well as different floating debt interests, and stockholders. Suppose stockholders will not advance money; that the general creditors are also unwilling to invest in the securities of the new company; that there are first mortgage bonds upon the property

whose interest has been fully earned and paid by the receiver; but that, in addition to the first mortgage bonds, there are first and refunding bonds—that is, second mortgage bonds. There may be also debenture bonds and car-trust certificates. In such a situation the underlying bonds and the car-trust certificates cannot be disturbed. Their security is ample, and there is no way in which the reorganization committee can get at them. If any attempt is made to impose upon them the burden of providing the money required, they will assert their rights taking away the security and eliminating all junior securities. The holders of car-trust certificates are also in an exceptionally strong position; they cannot be asked to furnish any money. The holders of the junior bonds with or without the participation of the stockholders, must here provide the necessary funds.

A case in point is that of the reorganization of the Western Maryland. In this reorganization plan, securities aggregating $50,951,950 remained undisturbed. Their owners were not called upon to provide any new money. The $8,274,160 of cash required for the payment of maturing obligations and for improvements and betterments was raised by the sale of $20,685,400 of the common stock of the company to a bankers' syndicate which offered this stock to the general lien and convertible holders and to the stockholders. The junior bondholders were offered the new stock at 40 per cent, up to 50 per cent of their holdings, and the holders of the common stock were offered the new common stock at the same price, up to 100 per cent of their holdings. The undisturbed securities, in this case, included the first mortgage bonds, $42,518,000; divisional bonds, $6,200,000; leased line bonds, $1,659,300, and leased line guaranteed stock $574,650. Interest on the first mortgage bonds had been fully earned, and there was no reason for asking them to make sacrifices. The divisional and leased line bonds and guaranteed stock were so secured that an

assertion by their holders of their rights under the contracts with the Western Maryland Railroad Company might have resulted in the disruption of the system. It was necessary, therefore, to appeal to the junior securities, and, in this case, the reorganization managers were fortunate in securing the coöperation of the stockholders. If the stockholders had not been able to respond, however, then it might have been necessary for the holders of the first mortgage bonds to have taken a part of the new stock, securing the coöperation of the general lien bondholders, if only to a partial extent, by allowing them to share in the new securities.

Summary of Methods Employed to Provide Money

I have suggested only a few of the complications which may arise. A reorganization committee may be confronted with a great variety of situations. Its task is to obtain the money on the best terms possible with due regard to the legal rights of all interests concerned. The only rule which seems established in the preparation of this portion of a reorganization plan is first to impose the burden upon the stockholders if they can be induced to assume it; next in order, to approach holders of unsecured floating debts; next the junior bondholders; and finally the holders of underlying securities. The appeal in each case is strengthened by the implied or express threat of complete loss to follow the foreclosure sale which would be controlled by the holders of the prior claims.

Finally, if money is to be raised from bankers or outside investors, a proposition must be made which is attractive to them. For example, if there are first mortgage bonds which cannot be disturbed, and if it is proposed to obtain the necessary funds without "compulsory" subscription by any of the old interests, by the sale of first and refunding mortgage bonds to a bankers' syndicate, the syndicate may insist upon a certain amount of stock.

They may also insist that this stock shall be given special preference. In such a case, the new company would issue preferred stock A to bankers, and the other interests would take B preferred and common stock.

The Underwriting Syndicate in Reorganization

We have already observed in the consideration of these several cases that the underwriting syndicate is a necessary feature in every reorganization plan. The commission paid to the syndicate will vary. In some cases it may be large. The Western Maryland Syndicate, we have seen, received a commission of 5 per cent. In the reorganization plan of the United States Shipbuilding Company, the committee announced that it had entered into an agreement with the Morton Trust Company and Thomas F. Ryan for the purchase and sale of the entire issue of $3,000,000 collateral trust sinking fund 6 per cent bonds at a price of 87½, so as to guarantee the cash requirements of the plan. These bonds were offered by the syndicate to the holders of the existing bonds. The low price offered the chance of a large profit to the syndicate.

CHAPTER XLIX

THE REORGANIZATION OF INSOLVENT CORPORATIONS
(Continued)

Reduction of Fixed Charges

The needs of the present have now been provided for, current indebtedness has been paid, and provision has been made for sufficient capital to bring up the plant to a condition of efficiency. The committee on reorganization now addresses itself to the task of reducing fixed charges so that they will come well within conservative estimate of the net earnings. We have already discussed the method by which the limit of fixed charges in the new company is to be fixed. This limit is, as already pointed out, the minimum net earnings of the company. The amount is usually based on the experience of the receiver, although some allowance may be made for an anticipated improvement in earnings. For example, in the Atchison reorganization of 1894 it was estimated that the minimum earnings of the property from 1891 to 1894 were $5,204,880, and the fixed charges proposed for the new company were $4,528,547. The lowest net earnings which the Union Pacific had ever reported had been $4,315,077. The interest on the bonds issued by the new company which took over the property in 1897, was placed at $4,000,000; the net earnings for the Northern Pacific in 1895, the smallest earnings for eight years, were $6,052,660; the fixed charges of its successor were placed at $6,015,846. Dr. Daggett,[1] in his summary of the results of a number

[1] Stuart Daggett, *Railroad Reorganization*, p. 357.

of railroad reorganizations; states that the fixed charges in seven large reorganizations from 1893 to 1898 were reduced from $65,984,219 to $45,576,984. It is now well recognized that unless this principle of reducing fixed charges below the lowest point to which net earnings have ever fallen is followed, there is danger that the work will, at some later period of depression, have to be done over again. This principle was not recognized in many of the reorganizations prior to 1893. Since that time, however, it has been generally accepted and may now be taken as an almost invariable rule. In recent reorganizations the reduction in fixed charges below estimated earnings has been carried to extremes. For example, by the reorganization plan of the Chicago, Milwaukee & St. Paul, annual fixed charges were reduced from $21,800,000 to less than $14,000,000 as compared with net earnings available for interest charges at that time of $20,000,000.

Handling of Rental Obligations

The fixed charges of a corporation may be divided into rental charges and interest charges. The charges of rentals can be more easily reduced than the charges for interest. As long as a company is solvent it must live up to its rental contracts and all other contracts. The rental contract is, however, made between the owner of the leased property and the old corporation, and constitutes no lien upon its property. That is segregated for the protection of other creditors. The lessor is an unsecured creditor, and can be dealt with as such. The company which takes over the property at a foreclosure sale is entirely free from all the lease obligations of its predecessor. Bankruptcy has wiped out the score. The new company need assume only such contracts as its reorganizers consider to be necessary to its success. The receiver has usually terminated or modified unprofitable lease contracts, and the reorganization committee has only to follow in his footsteps. If a leased

line has proven unprofitable, the reorganization committee can either dispense with it, or reduce its rentals. The reorganization committee has a free hand. They cannot be held to old agreements, which have lapsed and must be renewed before they can become binding.

A recent instance is the receivership of the Interborough Rapid Transit Company of New York, which has for years operated the subways and elevated lines of Manhattan. The elevated lines are owned by the Manhattan Elevated Railway Company, leased to the Interborough for a guaranteed rental equal to 5 per cent dividends on the Manhattan Railway stock. Their traffic has been so reduced that the Interborough incurred serious losses in operation. The drain of this lease in August, 1932, necessitated the appointment of a receiver, who can if he desires disavow the lease and release this derelict property to its stockholders. A similar situation exists in Philadelphia, where heavy surface line rentals are burdening the Philadelphia Rapid Transit Company, and a receivership has been threatened if they are not reduced by $3,000,000. In each case the lessee company is helpless. If only the lessor takes the courageous course of receivership, the terms of an unprofitable lease can usually be modified without distintegration of the lease connection.

Reduction of Interest

We come now to the reduction of interest. Just as holders of some of the bonds may have been obliged to make sacrifices by subscribing to new securities, so they may also be required to sacrifice some of their claims for interest in order that the solvency of the new company may be secured. This reduction of interest is accomplished in the exchange of the securities of the old company for the securities of the new company. The methods by which such an exchange is accomplished have been already suggested. The new company offers its securities

for subscription, in part in cash, and in part in the securities of the old company. If the old company has not been able to pay interest on $10,000,000 of second mortgage bonds, and if it is desired to eliminate this interest charge from the income account of the new company, the new company may offer the holders of the second mortgage bonds, $10,000,000 of preferred stock to be paid for with their bonds.

Which Bonds Shall Be Disturbed?

Some of the creditors of the old company must make sacrifices. Some of its bonds must be disturbed. Which bonds shall be disturbed? How shall their claims be modified and what compensation shall they be given for their sacrifices? Let us reverse the inquiry and ask what are the bonds which are not disturbed in a reorganization? In every reorganization we find some of these bonds. Take the Erie, for example; it has five divisional mortgages ranging from first to fifth on portions of the line which lie within the State of New York. These mortgages have survived three reorganizations, not being disturbed by any of them. In the same way, the Norfolk & Western Railroad, the Reading, the Baltimore & Ohio, have carried through their reorganizations certain issues of bonds, without, in any way, disturbing them, save, in some cases, to consolidate them by making attractive conversion offers into large issues. These bonds are safe from the reorganization committee for the reason that their interest, even in the worst years, has been fully earned. Even the receivers have recognized their claims and have paid their interest. Bonds secured by mortgages upon important branch roads, terminal property or equipment, do not suffer in a reorganization for the reason that there is no way to get at them. The property which secures them is indispensable to the company. Unless the rights of these holders are properly recognized they may inflict serious damage upon the system by seizing the property which

secures their bonds. It is true that the property securing these underlying bonds, a section of the main line of the Erie Railroad, for example, would be of no use to the bondholders. They could not operate it except as a part of the Erie System. The reorganized company, however, *must* have their property, and the position of these bondholders in the negotiation is supreme. Their interest has been earned and paid during the receivership, and there is no suggestion that they should make any changes except sometimes to exchange the bonds for bonds of equal or greater security, because protected by a first lien on the entire system.

Participation in Earnings: the Basis of Apportionment of Sacrifices

It may be necessary for the holders of first mortgage bonds, even though their interest has been fully earned, to subordinate their lien to the lien of new first mortgage bonds, without which the necessary money cannot be secured. Along with this sacrifice may also go a reduction in their interest claims. Speaking generally, however, the holders of first mortgage bonds whose interest has been earned, are not called upon to sacrifice their interest in reorganizations. In companies which present a complication of securities, first mortgages, divisional mortgages, general mortgages, debentures, etc., the sacrifices in interest are usually apportioned according to the extent to which the different bonds have participated in the net earnings of the company. The net earnings of the company are taken as the basis of the new fixed charges, and the reorganization committee apportions the net earnings among the various disturbed securities according to the amount which the property back of each security has contributed to the total. If the interest on a given bond issue has been earned, with a safe margin in addition, the position of these bonds as prior claims to net earnings, is not

usually disturbed. If interest has not been earned, or barely earned, the bondholders may be requested by the committee in charge of the plan, to accept income bonds or preferred stock in exchange for all or a substantial part of their holdings. Such a proposal is based upon the accepted fact, that if interest on an issue of bonds is not fully earned, even under the worst conditions, that bond is only partially secured, and its position as a claimant to an unconditional share in profits of the new company must be revised in accordance with the facts. The method employed in this reduction is illustrated by a statement made by the reorganization committee of the Atchison in the reorganization of 1895 with reference to the position of the general mortgage bonds in the reorganization:

> After making a careful estimate as to how much of the existing lines, if retained in the system, could, under the circumstances, be avoided, or if these lines be left out, what amount the Atchison system would be able to earn without the auxiliary lines, the committee has arrived at the conclusion that it would not be safe to place upon the property a fixed charge of more than four per cent upon seventy-five per cent of the principal of the present general mortgage bonds.

The situation of holders of general mortgage bonds whose interest has not been earned is here exactly stated. Since the company cannot earn their interest, they cannot, in reason, refuse to consent to a reduction of fixed income. Suppose they should refuse, what can they do? The only alternative is to foreclose the mortgage. To do this, they must raise enough cash to pay off all the prior liens, for their mortgage is spread over and is subordinate to the claims superior to their own. This is practically impossible, and their only course is to submit to the "request" of the reorganization committee, after holding out as long as possible for better terms. It is true that there is always the final resort to the courts, who may, at any time before

the recording of the new securities, hold up the whole proceeding by injunction. This will be done, if it can be shown to the satisfaction of the court that any interest is being unjustly treated. Such interference, however, cannot, unless in cases of the most flagrant injustice, be secured by a minority. If a large majority of the bonds are deposited, the courts will usually refuse to interfere, holding that the consent of the majority should be binding upon all. The contest over the Erie reorganization in 1895 offers an illustration. A plan had been proposed which seemed unfair to the second mortgage bondholders. Nevertheless 80 per cent of these bonds had been deposited, when a suit was brought in the New York Superior Court to enjoin the company from recording the mortgage. The court refused to grant the injunction on the ground that the consent of so large a majority of the parties in interest had made the plan already operative, and a minority should not interfere.

Conversion of Bonds into Preferred Stock

The nature of preferred stock has already been fully explained. Dividends on the preferred stock are payable out of net earnings after the expenses of operation, repairs and betterments, interest on the funded debt, rentals and taxes—the necessary cost of operating the business and keeping it out of the hands of the receiver—have been paid. The fixed charge of a mortgage bond whose interest must be paid, or foreclosure results, but which the company cannot earn in justice to its physical condition and under the circumstances of its business, is wisely converted into a claim whose payment is conditioned upon the net earnings of the company. In the exchange of bonds on which interest is not earned, for preferred stock in the reorganized company, the relation of the former creditors to the property is defined precisely. The element of risk which they assumed when they purchased the junior lien bonds is

exactly expressed in the contract which sets forth the relation of the preferred stockholder to the company.

The position of the junior bondholder is improved by the conversion of his bonds into preferred stock. Before the conversion, he is occasionally exposed to the risk of receivership which would depress the value of his securities, and cut off his income. By converting his junior lien bond into preferred stock, he enables the company to preserve its solvency and improve its credit, and he places it in a position where it cannot only earn interest but pay him his preferred dividends. With the two exceptions of the Southern and the Erie preferred stocks, on which dividends have only irregularly paid, the Erie having suspended them for twenty years 1907–1928, the preferred stocks issued in the reorganizations referred to in the following table have paid dividends for many years. If they retained these stocks, the former bondholders have fully recovered the losses caused by the defaults which led to these reorganizations.

The extent to which the conversion of junior bonds into preferred stock was employed during the great railway reorganizations following the panic of 1893 is shown in the following table:

Name of Road	Amount of Preferred Stock Issued			
	For Old Bonds	For Stock	For Assessments	Miscellaneous
Atchison, Topeka & Santa Fe	$96,740,000		$13,717,000	$9,200,000
Erie — 1st preferred	27,146,000	$8,537,000		2,854,000
Erie — 2d preferred	7,271,000			192,000
Norfolk and Western	22,833,000			167,000
Northern Pacific	54,880,000	17,620,000		2,500,000
Oregon Railway and Navigation Company	9,290,000		1,440,000	270,000
Reading — 1st preferred	7,184,000			20,816,000
Reading — 2d preferred	40,286,000			1,714,000
St. Louis and San Francisco — 1st preferred	8,214,000		1,150,000	3,850,000
St. Louis and San Francisco — 2d preferred	8,214,000			77,786,000
Southern Railway	32,887,000	8,799,000	7,814,000	4,800,000
Totals	$314,945,000	$34,956,000	$24,121,000	$124,149,000

Direct Reduction of Interest

The bondholders may also be required to accept a lower rate of interest, or to postpone their interest altogether for a series of years, or to take a low rate of interest with a gradually ascending rate, or to receive a portion of their principal in mortgage bonds and the balance in some junior security. In most cases, the reorganization committee, as an inducement to security holders to accept a reduction in their claim for fixed interest, offers them a bonus in some other security. If general mortgage bondholders, for example, are asked to receive one half of the principal in first mortgage bonds of the new company, and preferred stock for the balance, they may be given $500 in new first mortgage bonds and $750 or $1,000 in new preferred stock. The principal amount of their securities is, by this operation, increased. If the prospects of reviving business materialize, and the new management is efficient, the reorganization may prove to them to have been a blessing in disguise. An increase of capitalization is a feature which usually accompanies a reduction of fixed charges in the reorganization.

Illustration of Reorganization

In concluding the discussion of the readjustment of the securities in reorganization, out of a large number of cases I have selected the reorganization plan of the Fisk Rubber Company. This company went into receivership on January 3, 1931. The following securities were outstanding:

Mortgage, 20-year, 8% sinking fund gold bonds, with appurtenant coupons, maturing March 1, 1931	$7,620,000
5-year, 5½% sinking fund gold notes, with appurtenant coupons, maturing January 1, 1931	8,199,500
Other claims, principal amount	1,100,000

1st preferred stock, par $100	15,019,000
Convertible 1st preferred stock, par $100	2,986,800
Management stock, par $100	15,000
2nd preferred stock, par $100	362,900
Common stock, no par value (shares)	1,786,385

Two committees were organized, one representing the first mortgage bonds, and the second, the five-year notes. These committees, on January 15, 1932, announced a reorganization plan, the object of which was stated as follows:

Considering the unfavorable state of business in general, and particularly the tire industry, throughout the period of the receivership, and considering also the extreme difficulty of conducting any business profitably in receivership, the committee believes the results of receivership operations [sales equalled operating expenses] indicate that the business of the company, *if present interest charges of over $1,000,000 a year are eliminated,* has an earning power that should be preserved, and that under normal conditions in the hands of a reorganized company without funded debt and freed from the embarrassments of receivership should result in profitable operation. In the judgment of the committee the continuance of the receivership is a great detriment to the interest of the creditors of the company, and it is essential, if the business is to be preserved as a going concern and the proper volume of sales for the coming season assured, that reorganization be not delayed.

Although the current assets at the values at which they are carried on the books are equivalent to a large part of the funded debt of the company, if an attempt should be made to liquidate the business and to apply on account of the funded debt the proceeds ultimately realized, the results would be most unsatisfactory to the creditors.

After an exhaustive canvass it is clear that there is no present or reasonably early possibility of selling the property and business as a going concern to outside interests at a price that would yield even as much as liquidation. The accompanying plan furnishes the only practicable means of lifting the receivership, and the committee believe that it fairly recognized the interests of the various classes of creditors and stockholders.

The new company under the plan will begin business with no funded or bank debt or fixed interest charges. Through the distribution of preferred stock and common stock the creditors will

become the principal owners of the property, except only for so much as the new management shall acquire and except as far as stockholders of the old company shall avail themselves of the offer to purchase shares of new preferred and common stock (voting trust certificates) for $3,600,000 cash. This offer is made to creditors and stockholders, who may subscribe in any amount, but is subject to allotment in such a manner that creditors, as a group, shall have the first right to subscribe to one-half the offering, and stockholders, as a group, the first right to subscribe to the other half.

The assets of the company are to be purchased by the committee after foreclosure sale, all assets to be purchased together and transferred to a new company.

The basis of exchange of the new securities for the securities of the old company are set out in the following table:

Securities	Outstanding	Will Receive	
		Shares of Preferred Stock	Shares of Common Stock
1st mortgage 8s	$7,620,000	34,290 *	228,600*
Each $1,000	.....	4½	30
5-year 5½% notes	8,199,500	22,549	163,990
Each $1,000	.....	2¾	20
Other claims	1,100,000	3,025	22,000
Each $1,000	.....	2¾	20
To be offered under rights of purchase conferred by plan....	.....	36,000	252,000
Each $100	.....	1	7
Available for other purposes	.....	54,136	333,410

* In addition, ratable proportion of preferred stock and common stock of No. 1767 Broadway Co., Inc., or of net proceeds thereof, acquired by the committee, or certificates representative thereof.

Note: Depositors of bonds, notes and claims will also have the right under the conditions mentioned below to subscribe for preferred stock and common stock (voting trust certificates) of the new company.

The following table gives the amount of stock in the new company that may be purchased by holders of certificates of deposit for each $1,000 principal amount of existing

securities and claims, and by holders of each 20 shares of each class of the stock of the old company:

Existing Securities and Stock	Shares of Preferred Stock	Shares of Common Stock V. T. C.	Cash Payment
1st mortgage bonds per $1,000 principal	1	7	$100
5½% notes per $1,000 principal	1	7	100
Claims per $1,000 principal	1	7	100
Convertible 1st preferred stock per 20 shares	1	7	100
1st preferred stock per 20 shares	1	7	100
Management stock per 20 shares	1	7	100
2nd preferred stock per 20 shares	½*	3½*	50
Common stock per 20 shares	1/10*	7/10*	10

* Scrip certificates for fractional interests in a share.

Here is illustrated the most drastic form of reorganization. All debts and claims are wiped out. Preferred stock and common stock are given in exchange for the old debts. The stockholders are eliminated except as they subscribe to stock of the new company on exactly the same terms as those offered to creditors. *This cash subscription is not underwritten,* and there seems to be no reason for any stockholder or creditor to buy any of the new stock, since the new company will be abundantly provided with working capital from the assets of the old company. The net current assets in the hands of the receiver, as of November 30, 1931, were as follows:

Cash	$6,801,467
Accounts and notes receivable	4,422,776
Inventories	4,707,284
Less accounts payable	571,003
Net current assets	$15,360,523

Out of this sum must be paid the receivers' expenses.

This is a creditors' reorganization. Stockholders are invited to come in, but only as new subscribers. Fixed

charges are not reduced, they are eliminated. New management is provided and is to receive 25,000 shares of new common stock and options on another 25,000 at a low price. The new company's credit will be excellent, if indeed it needs credit.

This plan was not acceptable to many of the creditors. Three objections were made: (1) that the amount of current assets retained by the new company was excessive, and that a substantial distribution should be immediately made to the creditors; (2) that the proposed new management had no record of experience, provided no underwriting, and was not entitled to the stock and options stipulated in the plan; (3) that the creditors should not be required to contribute any cash to meet these objectives.

The plan, therefore, was modified. In the new plan, dated August 29, 1932, each $1,000 bond of the old company received $400 in cash; each $1,000 note, $370; and

	Shares of Preferred Stock of the New Company	Shares of Common Stock of the New Company	Shares of Common Stock of the Real Estate Company
Deliverable in exchange for deposit of existing securities and claims: $7,200,000 bonds with appurtenant unpaid coupons....	22,800	228,000	15,240
$8,199,500 notes with appurtenant unpaid coupons	16,399	163,990	.....
$100,000 other claims (established)	200	2,000	.....
Deliverable upon cash subscriptions by stockholders of the old company..	.....	300,317⅚	.....
Total	39,459	694,907⅚	15,240
Available, if necessary, for other purposes of plan or to remain unissued.....	541	5,092⅙	.....
Total authorized	40,000	700,000	15,240

each $1,000 of the proven claims (which were small in amount), $370. The allotment of shares in the new company was changed, as tabulated on page 678.

The new plan greatly reduces the cash resources of the new company, which, on the basis of June 30, 1932, will amount to $9,209,588. No cash is to be contributed by noteholders or bondholders. The management stipulation was eliminated. A liquidating company was also organized, the stock of which is to be owned by the new Fisk Company. The plan proposes to rest in this company $50,000 in cash and title to three tire plants, and the stock of a company that owns the Fisk Building in New York. This company, the receivers say,

> furnishes a means for liquidating under relatively favorable conditions those assets, particularly plant assets, which would not now be useful to a reorganized company and which are now a source of expense to the receivership estate.
>
> The plan provides for the distribution of a large amount of cash, and also provides for realizing greater value from the remaining assets than in all probability can be expected from liquidation or any other arrangement that has been proposed. The receivers believe that the large amount of cash which the plan distributes is the most that can be distributed after making adequate provision for cost of receivership and reorganization and retaining minimum working capital for the new operating company. . . . The receivers are heartily in favor of reorganization as opposed to sale. On this point they say . . . there is no present or reasonably early possibility of selling the property and business as a going concern to outside interests at any reasonable price. If the business is to be liquidated, the amount of provable claims against the unmortgaged assets will be increased and large expense and prolonged litigation will in all probability be unavoidable. It is to be noted, also, that the considerable time necessary to liquidate will inevitably delay any cash distribution to creditors.

The Voting Trust in Reorganization

One more feature of reorganization plans demands attention. The bondholders have controlled the reorganiza-

tion and have made sacrifices in order that the plan might be successful. They insist, as a condition of their participation, that they should receive some guarantee of the quality of the management. The stock of the new company, if placed upon the market, will command a low figure. It may fall into the hands of speculators who may exploit the property for their own benefit. The bondholders fear that they may have another default to suffer, another floating debt to take care of. To guard against this danger, it is almost invariably provided that the stock of the reorganized company shall be placed for a series of years in the hands of trustees who will issue to the holders certificates of beneficial interest in any dividends which may be paid on the stock, the voting power, however, remaining with the trustees.

These voting trust certificates, when issued on behalf of large public corporations, are listed on the public exchanges, and are dealt in exactly as are shares of stock. The voting trustees are usually named by the banking firm which carries through the reorganization. They represent primarily the creditors' interest. Their administration has been generally successful and they have materially assisted in restoring to public confidence the corporations for whose management they have been made responsible.

The powers of bondholders to deal with stockholders and unsecured creditors in reorganizations were very seriously curtailed by the decision of the Supreme Court in the case of Northern Pacific Railroad Company *v.* Boyd, known as the Boyd Case.[2] The Northern Pacific Railway Company was reorganized in 1896. The reorganization was controlled by the bondholders and was accomplished by a foreclosure. The property was bought in by the bondholder's committee for $61,500,000, an amount $86,000,000 less than the secured debts. It was transferred to a new corporation, which issued $345,000,000 of securities. The

[2] 228 U. S. 482—1913.

old preferred stockholders received 50 per cent of their holdings in new preferred stock and 50 per cent in new common stock on paying an assessment of $10 a share, while the old common stock in return for an assessment of $5 a share received 100 per cent in new common stock. Unsecured creditors sought to resist the carrying out of the plan on the ground that it turned over a valuable equity in the property to the stockholders of the old company to the prejudice of unsecured creditors. The Circuit Court, however, held that there was no equity in the property out of which these creditors could be paid and that the mortgage bondholders in purchasing the property at foreclosure sale could make any arrangement they chose with the stockholders of the old company.

The new company prospered exceedingly and its stock rose to a high figure. Boyd, the owner of a judgment against the old company, brought suit against both companies, attempting to recover the amount of his judgment out of the property, alleging that the foreclosure sale was invalid because it was made in pursuance of a Plan of Reorganization which excluded the unsecured creditors, although the stockholders were allowed to retain their interest. The lower court sustained this contention, and on appeal, the Supreme Court, by a vote of five to four, upheld the lower court:

> The opinion of the majority of the Court proceeds upon the theory that while the bondholders might have lawfully bought in the property covered by the mortgage and kept it for themselves to the exclusion of both the unsecured debt and the stockholders, the moment they provided for participation in the new company by the stockholders, even at the price of paying a heavy assessment, the obligation arose to make provision for the unsecured debt which would recognize the priority to the interest of the stockholders.

The prevailing opinion says (p. 504):

> The property was a trust fund charged primarily with the payment of corporate liabilities. Any device, whether by private

contract or judicial sale under consent decree, whereby stockholders were preferred before the creditor, was invalid. Being bound for the debts, the purchase of their property by their new company, for their benefit, put the stockholders in the position of a mortgagor buying at his own sale. . . . That such a sale would be void, even in the absence of fraud in the decree, appears from the reasoning in *Louisville Trust Company* v. *Louisville Ry.*, 174 U. S. 674, 683, 684 (the Monon case), where, "assuming that foreclosure proceedings may be carried on to some extent at least in the interests and for the benefit of both mortgagee and mortgagor (that is, bondholder and stockholder)," the court said that "no such proceedings can be rightfully carried to consummation which recognize and preserve any interest in the stockholders without also recognizing and preserving the interests, not merely of the mortgagee, but of every creditor of the corporation. . . . Any arrangement of the parties by which the subordinate rights and interests of the stockholders are attempted to be secured at the expense of the prior rights of either class of creditors comes within judicial denunciation."

The Court then says (p. 507):

The invalidity of the sale flowed from the character of the reorganization agreement regardless of the value of the property, for in cases like this, the question must be decided according to a fixed principle, not leaving the rights of the creditors to depend upon the balancing of evidence as to whether on the day of sale the property was insufficient to pay prior encumbrances.

The Court continues (p. 508):

This conclusion does not, as claimed, require the impossible and make it necessary to pay an unsecured creditor in cash as a condition of stockholders retaining an interest in the reorganized company. His interest can be preserved by the issuance, on equitable terms, of income bonds or preferred stock. If he declines a fair offer he is left to protect himself as any other creditor of a judgment debtor, and, having refused to come into the just reorganization, could not thereafter be heard in a court of equity to attack it.

In the face of this opinion it is impossible legally to exclude any creditor from the benefits of the reorganization if the stockholders are allowed to participate. The

unsecured creditors must be offered some form of security and they cannot be forced to pay any assessment as a condition of receiving these securities.[8]

Final Steps in Reorganization

Before the reorganization plan is put into effect, after an agreement has been reached between the different committees, it must, if it relates to a public utility company, be submitted to the Interstate Commerce Commission, or a State Utility Commission having jurisdiction over the issue of securities. The Interstate Commerce Commission has insisted on its right to pass on the plan before it is submitted to the court for final approval. The plan is then submitted to the court which holds the property through its receiver. If the reorganization does not involve foreclosure, after the receiver's expenses have been provided for, the receiver is discharged and the company resumes possession of its property. If foreclosure sale is deemed necessary, a master is appointed by the court, or in some cases, the receiver may be authorized to make the sale.

The Sale to a Committee

One of the reorganization committees or a smaller purchasing committee is appointed at a conference of parties in interest to buy in the property.

The procedure of sale is illustrated by the sale of new properties of the American Writing Paper Company in 1927. "The properties," said a statement on behalf of the new company, "were knocked down by the special master (appointed by the court) to Charles S. Flanagan and Norbert W. Smith of New York, joint tenants and bidders *representing the reorganization committee,* for the sum of $3,650,000. The total sum realized including a

[8] Paul Cravath, "Reorganization of Corporations," in *Some Legal Phases of Corporate Financing.*

previous sale was $5,560,600." By this sale, title to the property was vested in the reorganization committee with which the bonds of the company have been deposited when all the bonds are deposited. The price offered may represent the par value plus a cash sum fixed by the court to cover the expenses of the receivership. When a minority of the bonds are not deposited the committee may bid only the upset cash price fixed by the court. If nonassenting bondholders wish to bid, for example if 10 per cent of the bonds are nonassenting and compete at the sale, they must overbid the court's price in cash and 90 per cent of this excess amount will go to the assenting bondholders. Suppose, for example, that the court fixed $250,000 in cash as the upset price and that the nonassenting 10 per cent of creditors wish to buy in the property. Suppose further that the bid is $1,250,000. The majority bondholders would receive $900,000 out of this amount and the minority would have a credit of only $100,000 which would require them to find $1,150,000 in cash.

On the other hand, if the majority bid $1,250,000—$250,000 for the costs, and $1,000,000 additional—they would receive $900,000 credit and the minority would receive $100,000. This situation gives the majority, if that is large, 80 or 90 per cent of the total, an overwhelming advantage in bidding against a small minority, because of the large credit which they will receive on their payment.

The reorganization committee is now the owner of the property and proceeds to carry out the reorganization plan.

Should Bondholders Participate in Reorganizations?

Following reorganization, the former bondholder is still concerned with the preservation of his capital investment and the receipt of a return thereon. As a rule, his principal has been diminished, especially if the failure was a

grave one, so that the recouping of the loss will depend upon the future success of the business. Likewise his income will be reduced, since he usually receives bonds with a contingent or reduced interest rate, and if he has become mainly a stockholder, the record shows that his income is usually deferred for a number of years. In considering the preservation of his principal or its increase, the bondholder must turn to the market for his new securities. Here the results of reorganization present no uniformity. The success of the reorganization and the future earnings of the company control the market for the new securities. In some instances the market prices were highest a year after reorganization and steadily declined thereafter. In other cases the market prices steadily improved, so that by waiting patiently for several years the loss of principal could be minimized by sale of the new securities. As was previously stated, the bondholder should center his attention on the management and on the demand for the product or service of his company, and at best he will have to do a considerable amount of guessing.

In going over the detailed results of reorganization for the various industrial groups, it was found that only a few of the original bondholders could have made a gain on their original principal by the sale of their new securities. In twenty-seven cases they could have more than recovered principal and all arrears in interest. In but six cases were the new securities all bonds. In twenty-one cases the new securities were all stocks, or were mixed. The gains could be traced to the market prices for the stocks. This does not mean that the bondholder would be better off if he received stocks in reorganization rather than bonds, but it does indicate that if the reorganization is successful and future earnings improve, there is chance for greater gain in stocks than in bonds. Stock prices are more volatile. Profits or prospect of profits give a fillip to the market which usually swings out of proportion to true conditions at the moment.

Thus speculation may aid in recouping the bondholder's loss.

One fact clearly shown from the history of reorganizations is that the depositing bondholder fares very much better than the nondepositing bondholder. The latter stands out, refusing to join in the reorganization and accept the new securities to be issued. He receives cash instead, but if the reorganization is accomplished as planned, his cash payment is usually less than half the face value of the new securities given to the depositing bondholder. Even though the nondepositors comprise a very small minority of all the bondholders, this has been the rule. The writer has checked a number of reorganizations where the cash payment to nondepositors was highest, and found that he could not have purchased as many shares of the stock or as much par value of bonds of the new company as the depositing bondholders received. There is also evidence of penalizing the nondepositors, which is acquiesced in by the court in fixing the upset price so that they cannot benefit at the expense of those who go along. Furthermore, unless a very substantial majority of each security is held by its committee, the reorganization may fail of accomplishment and all will suffer greater losses. This would indicate that all bondholders will benefit by prompt deposit of their bonds with a committee which is honestly endeavoring to protect their interests and where there is no evidence of an attempt to treat them unfairly in the plan. The longer default continues and receivership goes on, the greater the expenses which must be satisfied in cash before the bondholder can receive anything, and the longer he must wait before he has any chance of again receiving an income on his investment. Protracted lawsuits or delays incurred while nondepositors jockey for position or attempt to create a nuisance value for the bonds cost every one real cash and are of doubtful value.

The loss in income suffered by the bondholder while

default continues and an effort is being made to reorganize or liquidate a business is of serious consequence to him. Therefore, a prompt reorganization or liquidation will, as a rule, reduce this loss. As was shown in the case of the Chicago, Milwaukee, St. Paul, and Pacific Railway Company, the expenses of receivership were estimated to be considerably in excess of $1,000,000 a year. The reorganization plan was promptly worked out and adopted by all the security committees. Even though a dissatisfied group delayed final consummation of the plan for about two years by court action, they were finally defeated. Including this delay and considering the size of the company, the many security issues involved, and all the legal details to be handled in various states, this was a prompt reorganization. If the suit by the dissatisfied group had not been brought, it would have been accomplished much sooner and these expenses saved.[4]

[4] The above discussion of the results of reorganization to the bondholders is based upon an unpublished study by W. E. Warrington, Instructor in Finance in the University of Pennsylvania.

CHAPTER L

LIQUIDATION

A corporation should be liquidated when there is no longer a reasonable prospect of profit and when a substantial amount can be recovered for creditors and stockholders. The majority of business enterprises are doomed to failure from the outset. They are the victims of faulty investigation, bad planning, insufficient capital, and poor management. Most of them deserve the title, "The thing that never should have been born," given to the old wizard Zikali, by Chaka, the Zulu Napoleon, in a Rider Haggard novel. Like the eggs of the salmon or the spawn of the oyster, the mortality among infant businesses is very great. Only a small percentage, it is estimated, grow to a profitable maturity. Even if the new enterprise gets on its feet and makes a profit, its active life is likely to be short. An exhaustion of funds and an accumulation of debts through the credulity of sanguine creditors unite to end its existence in bankruptcy. Out of bankruptcy comes an average of 8 per cent of debt. Such experiences give us little light on the principles and practices of orderly liquidation.

Occasionally, however, a company with money enough to survive the experimental period, and producing something which is in line with the trend of demand or a standard product which an emergency such as the World War makes profitable, may make large profits within a short time. Its stockholders, who are often active in the business, may be dominated by that *rara avis,* a conservative business man, so that it resists the two temptations of overpayment of dividends and overexpansion of plant; and accumulates a substantial reserve in cash and securities, paying also

modest dividends to its stockholders. This condition may continue for a number of years. The successful business may be sold in a consolidation, as thousands of companies were sold from 1898 to 1902, and again from 1923 to 1929, and the fortunate stockholders may sell the securities which they receive and so escape the risks of business. The experience of Eldridge Johnson, who founded the Victor Talking Machine Company and built it up to a large and profitable institution, is a case in point. His business in 1925 was dying on its feet. It had lost approximately $5,000,000 in that year. Its surplus had shrunk from $31,351,000 in 1921 to $122,999 in 1925. Already the funeral baked meats were in preparation, when the Radio Corporation of America, in 1926, bought the stock at a high price and saved, or rather restored, Mr. Johnson's fortune. The $28,175,000 which he received for his stock Mr. Johnson promptly invested in tax-free New Jersey municipal bonds. and the R. C. A., be it remembered, has never paid a dividend on its common stock.

Many concerns are not so fortunate, or so prudent. After accumulating substantial reserves out of profits—in the present situation, war profits—they continue their business in the natural hope of continued gains and the fixed opinion of their managers that they are great business men who, by their courage, initiative, and ingenuity, have made all this money. Then comes the period of decay when liquidation is indicated but seldom effected.

The Kelly Springfield Tire Company was incorporated on April 15, 1899, as the Consolidated Rubber Tire Company. Its plants were located at Akron and Wooster, Ohio, and Buffalo, New York; in 1925 all manufacturing was concentrated at Cumberland, Maryland, one of the worst locations that could have been chosen, and evidently selected by the officers in a moment of mental aberration or overweening optimism. The Company, during the war and post-war years, at a time when the automobile in-

dustry was rapidly expanding and when the quality of tires was so poor that 7,000 miles of service was an extraordinary achievement, made large profits and conserved those profits. At the end of 1925 its balance sheet was as follows:

Assets		Liabilities	
Plant accounts, patents, equipment, etc.	$20,077,605	6% preferred stock	$2,950,000
Cash	1,699,127	8% cumulative preferred stock	5,264,700
Real estate, deferred	89,163	Common stock	9,096,003
Investments	32,370	10-year 8% notes	7,000,000
Notes and accounts receivable	4,410,928	Accounts payable	2,460,040
Deferred charges	502,739	Notes payable to banks	750,000
Inventories	8,051,957	Balance due customers	21,475
		Accrued interest	82,500
		Accrued taxes	254,974
		Premium on 10-year notes redeemed	249,547
		Surplus and reserves	6,734,650
	$34,863,889		$34,863,889

This company as shown by the balance sheet was in a healthy condition. It was retiring its notes at the rate of $1,000,000 a year and was paying regular dividends on its preferred stock. On January 1, 1925, allowing a liquidation value of only 25 per cent of its fixed assets, the company could have paid off all its debts, retired its preferred stock, and paid $2,404,949 to its common stockholders. Of course there was no suggestion of such a course. The year 1925 showed a profit of $1,452,577 as against a combined deficit of $2,692,034 for the two preceding years. Operations had been consolidated in the Cumberland plant, and the future looked bright. In 1926 came disaster. Let the president explain it. His report of March 12, 1927, said:

The year 1926 was one of substantially declining prices of both rubber and tires. In the beginning of the year when crude rubber was selling at about 90 cents a pound, we had on hand and had commitments for less than 4 months supply based on normal business. However, the backward spring and summer, together with the necessity of rebuilding many of our

sizes, checked sales, resulting in the accumulation of inventory of both finished product and crude rubber, the price of which began rapidly to decline until it reached 40 cents a pound. In addition to this, there were three price cuts in tires amounting to 50 per cent.

During the year the Cumberland plant was thoroughly reorganized. The changes were sweeping, and during such reorganization it was necessary to cut down production and to rebuild certain sizes with which to replace certain defective goods. All stocks on hand were carefully inspected, and all tires not fully first class were branded seconds and sold as such. This program of necessity resulted in a substantial operating loss for 1926.

Based upon the business the company is now doing, the favorable response which the buying public is now making to our products, and the fact that the company is now freed from the causes which contributed to the loss in 1926, the management believes that the business of the company *for the year 1927 will be satisfactory.*

This did not tell the whole story, although it shows a degree of mismanagement that was serious. In order to get through the "reorganization" of its business, the Kelly Springfield Tire Company increased its notes payable to banks nearly $8,000,000 and was in a precarious position. Its combined surplus and reserves had fallen to $2,180,889, and it had lost in a single year $3,349,800. The opportunity to liquidate this mismanaged, badly located, overcapitalized company had disappeared. Liquidation would have shown something for the preferred stock, but nothing for the common.

Now the common stockholders, gluttons for punishment, rallied to the rescue. The capital structure was changed. In 1927, 700,000 shares of new common stock were authorized and offered to the common stockholders at $21 a share. A portion of it was underwritten for a substantial commission, and practically all of it was sold, providing the company with sufficient cash to pay off all of its bank debt and to retire the balance of its ten-year notes. After the receipt of this new money, the current asset-ratio was in-

creased to 12½ to 1, and, as the president said in his annual report, "It is expected that the year 1928 will show further improvement in earnings over 1927, when a profit of $357,741 was earned." Again came disappointment, a decline in inventory values, cuts in prices, and a loss of $2,490,513.

At this point it might appear that the stockholders had lost enough. They had given the management a year's trial. Dividends, of course, had been suspended on both classes of preferred stock since 1924, but the company was free from debt. At the end of 1928 it could have been liquidated, all preferred stock with arrearages of dividends could have been retired, and, still allowing a realization of one-fourth of the book value of the fixed assets, about $10,000,000, or over $40 a share, might have been realized for the common stockholders. Liquidation was the move indicated when the miserable showing of the Kelly Springfield Tire Company was contrasted with the profits of other companies. In 1928, in the face of all the discouraging circumstances advanced to explain the showing of the Kelly Springfield Company, Goodyear Tire and Rubber showed a net income of $13,327,844, a slight increase over 1927.

But the Kelly Springfield management courageously carried on. They had plenty of the stockholders' money and they continued their earnest efforts. In 1929, while Goodyear earned $25,003,156, Kelly Springfield lost $4,080,486. Even yet something could have been saved for the stockholders. At the end of 1929, current assets amounted to $12,257,444, enough to have retired the preferred stock. Still there was no thought of liquidation. The year 1930 told the same dismal story, a loss of $3,796,054, while Goodyear made $14,798,718. With this year the opportunity for profitable liquidation had faded. The harvest was passed, the summer was ended, and the liquid assets of the Kelly Springfield Tire Company had not been saved for the preferred stockholders.

The experience of the Kelly Springfield Tire Company is typical. Liquidation is usually considered only as a last resort when the company can go no further. The reasons for refusing to liquidate as long as money is available to carry on grow out of the psychology of managers, owners, and creditors. From instinct and interest these men are incurable optimists. The managers, who are generally large stockholders, have given their lives to building up the business. In the case cited, one of the officials literally worried himself to death over the misfortunes of his company. They are now in middle life. They draw substantial salaries and they are persons of importance in their communities. To admit the fact of failure, to advise the stockholders to liquidate and save what they can out of the dying business, is simply beyond them. They cannot do it. They cling to the few straws of hope which the rushing tide of business change brings within their reach. In their minds prosperity is always just around the corner. Unless forced to give up, they pursue the foxfires of hope until the last dollar is spent.

Another consideration operating on the minds of stockholders, as distinct from managers, is the effect of liquidation upon their holdings. If there are no creditors and no senior stockholders, a long siege of adversity may wear down the stockholders' resistance, and, as many New England textile companies, for instance, have done, they may liquidate. Such a situation, however, seldom arises. Even if the original capital structure did not contain senior securities whose principal or par values, with accrued interest and dividends, must be fully paid out of the proceeds of liquidation before junior security holders receive anything, the company has usually issued senior securities, often to postpone the evil day of final reckoning. With senior securities outstanding in substantial amount, liquidation would leave nothing for the common stockholder, whom the management generally represents and whose consent is

generally necessary to authorize corporate *hari kari.* Why then, so long as operations can be continued, should common stockholders consent to liquidation? Everything will go to the bondholders or preferred stockholders, who will inevitably demand their pound of flesh, even though they shed the financial blood of the common stockholders in the cutting of it.

Even should a sale of the entire business be made in exchange for the stock of another company, this stock must go to the preferred stockholders of the selling company. The National Bellas Hess Company, which was placed in receivership in April, 1932, is an example. On July 13, 1932, the name, goodwill, customers' list, and miscellaneous operating equipment were sold to a company organized by a number of key executives of the original company for $100,000 cash in installment form, the assumption of certain liabilities, and 300,000 shares of common stock. After the payment of debts, reserves, expenses, and fees, the remainder of the consideration will go to the preferred stockholders. Without the receivership it would, of course, have been impossible to secure the consent of the common stockholders to such a plan, which gave them no share of the purchase price. In 1929 the balance sheet of the National Bellas Hess Company showed net current assets of $8,718,123.

Why should the common stockholders make this grand gesture of renunciation? Of course, they will hang on as long as possible. Unless they default in the payment of some debt, or unless the charter gives the preferred stockholders a controlling voice in the matter, even though common stockholders should be able to coerce a management clinging tenaciously to their salaries and offices, there is no inducement to them to salvage the assets for the benefit of creditors and preferred stockholders. It is better to carry on the decaying business in the hope of a miracle. This situation recalls that most valuable of all preferred

stock protections, the provision for the transfer of the voting power when a year's preferred dividends have not been paid. If this had been included in the charter of the Kelly Springfield Tire Company, the preferred stockholders could, had they desired (and of this desire there was, of course, no evidence), have forced liquidation in 1930, when there was still something to be salvaged.

Still, for companies in dying industries, and there are many such, or for mismanaged companies in solvent industries, the day of doom finally arrives. They can go no further. Their cash is gone. Their credit is exhausted. The last day dawns. Like the Apostle, they have fought the good fight, they have finished their course, they have kept the faith; but unlike him, they have usually laid up for creditors and owners nothing but the meager fruits of salvage.

The methods of liquidation may be considered under two headings: first, judicial sale; and second, the realization of the assets of a solvent company.

The first need not long detain us. A receiver may be authorized by the court to sell the property in his hand on the best terms obtainable and as promptly as possible. Or the trustee in bankruptcy may follow the same procedure. In making such a sale, the trustee or receiver is not limited to cash sales. He can accept part cash, with deferred payments secured by such liens as the situation warrants. Until these liens are discharged, however, these legal custodians with their retinue of attorneys continue to function at the expense of the bankrupt estate, so that it is usually more profitable for the creditors' committee, whose advice the receiver is likely to follow, to sell the assets for cash as quickly as possible and to turn over to the creditors whose claims he has approved the small balance after expenses are paid.

Here again the inveterate optimism of creditors, so long as a ray of hope remains, often stands in the way of liqui-

dation. The reorganization committee recommends that an earnest effort be made under new management and with new capital secured by a "first lien" upon the assets, and the bondholders fall into line and, by a process of blood transfusion, revive, if only for a little while, the moribund business. They accept debenture bonds or preferred stock for their claims, and "carry on"—often only to find that the new money has been thrown away. Consider, for example, the case of the Ground Gripper Shoe Company, bankrupt. On May 3, 1932, the committee for the holders of the 6 per cent convertible sinking fund gold debentures and general unsecured creditors said:

> A consolidated balance sheet of the bankrupt company furnished by the trustees in bankruptcy as of March 31, 1932, treating wholly owned stores and Canadian Company as investments, shows total assets with a stated book value of $2,689,995, against which are listed actual liabilities in the amount of $4,043,120. . . . Of such listed assets, however, approximately $1,507,000 are held by the ——— Bank and the Selby Shoe Company as against their respective claims, totalling $1,010,581.84, which are assets to be secured. These assets consist of accounts and notes receivable and manufactured merchandise, and . . . in the event of liquidation of the business such assets could not be expected to realize even a sufficient amount to pay in full such claims for which they are held. . . . The remaining assets appearing on such balance sheet as at March 31, 1932, totalling $1,183,063. . . . An analysis of such remaining assets inevitably leads to the conclusion that on forced liquidation only a very small fraction of such values could be realized.

In other words, the company is through. But the creditors are generous. They think that there is life in the carcass, and they are willing to coöperate. The bank, whose record in such matters is one of intelligent generosity, has offered to reduce its secured claim from $800,000 to $300,000, transferring $500,000 to the class of unsecured claims, and the Selby Company has offered to furnish new capital. So the committee proposes to the creditors that the com-

pany shall be reorganized, that $375,000 of serial debentures and $249,336 of seven-year second debentures be issued. Of these senior debentures, $300,000 are to be issued to the bank, which will then release all the cash notes and accounts of the company held by it, and $75,000 together with the 72,000 shares of common stock, to the Selby Company, in return for the sum of cash necessary to carry out the plan, the amount to be afterwards determined. The creditors of the company are to receive 36,000 shares of the preferred stock. The Selby Company hopes to preserve its outlets for its product, and the bank hopes to get a return on its preferred stock. Without hope, life could not go on.

When the process of disintegration and dissolution has stopped short of receivership or bankruptcy, a more profitable program may be followed, which may recover for the creditors and stockholders a portion of their investment.

The business may be sold as a going concern, either for cash or for securities of the purchasing company, a form of merger whose details have been outlined in a preceding chapter. A large number of bank liquidations, notably that of the Foreman-State National Bank and the Foreman-State Trust and Savings Bank of Chicago, which was consolidated in 1931 with the First National Bank of Chicago and the First Union Trust and Savings Bank, have been accomplished by merger. The recent legal troubles of the New York Superintendent of Banking, Mr. J. A. Broderick, were due to his well-meant and narrowly frustrated attempts to save the Bank of the United States in 1931 by merging it with three other institutions. Fortunately for him, the jury before which he was brought to trial on a charge of official misconduct, because he did not close the Bank of the United States at an earlier date and because of an alleged laxity in permitting unsound banking practices to continue, gave Mr. Broderick credit for good intentions and acquitted him. Under the conditions which have

prevailed since 1929 a bank merger is likely to be a disguised liquidation.

In some cases a portion of the assets can be advantageously sold and the remainder kept either for subsequent sale, if prospects did not improve, or, if a miracle occurs, for subsequent profitable operation. The writer has recently had called to his attention the situation of a manufacturing company with no debts, $247,000 of capital stock, and $196,000 of liquid assets including $60,000 of Government bonds. Last year showed a loss of $13,000, and this year will show a greater loss. Here an immediate partial liquidation is indicated. The directors can make a sufficient addition to surplus by reducing the par value of the outstanding stock in the manner indicated in a former chapter and can then declare a special dividend of perhaps $125,000 out of the current assets, leaving $55,000 of working capital in the company with which to carry on till, if ever, the company is again able to operate at a profit. In this case, from available information, the business offers little promise of recovery, and a complete liquidation of assets is indicated as the wisest course. This, however, is apparently beyond the resolution of the stockholders.

The sale of the Triplex Safety Glass Company of America to the Libbey-Owens-Ford Company, of Toledo, Ohio, is another illustration. This company, organized in 1928 largely on the strength of a contract with Ford, in 1930 showed a profit on net sales of 3,525,894 of only $34,075. Its debts were insignificant. Its prospects were gloomy. It had, however, certain valuable patents and had brought a number of suits against infringers. In one suit it had been successful, and a substantial recovery of damages is anticipated from certain large companies. These patents, therefore, had a demonstrated value in the hands of a strong company like Libbey-Owens-Ford, although the Triplex Company, a helpless lamb among the ravening wolves of the glass industry, could not make profits outside of the

courts, and in its present condition of desuetude might have great difficulty in proving large damages. Therefore, the management of Triplex took wise counsel of its fears and sold its goodwill, land, buildings, machinery, patents, and trade-marks, and a substantial portion of its inventory, together with its unprofitable Ford contract, to Libbey-Owens-Ford. The price was 29,490 shares of the purchaser's stock, cash for the inventory purchased, and $25,000 cash additional. The Triplex Company retained all its cash and receivables, its rights to damages in connection with its patent suits, and the stock of the Triplex Products Company, organized to develop certain side lines.

In disposing of the proceeds of the sale, the Triplex Company must, under its charter, apply the proceeds first to satisfy the claims of the preferred stock, which was accomplished by purchasing for retirement nine out of ten shares in return for $40 in cash, two shares of Libbey-Owens-Ford stock, and one-tenth of a share of the preferred stock deposited for acceptance of the offer. The Triplex Company was to be continued as a holding company for the stock of Triplex Products and to receive and distribute the proceeds of the infringement suits. The common stockholders of Triplex would be relieved of the burden of 90 per cent of the preferred stock and, subject to the rights of the remaining tenth, would receive all of the cash receipts of the company from whatever source derived, including the anticipated dividends on the stock of Triplex Products. This was an excellent transaction from the standpoint of both classes of stockholders of Triplex, and particularly satisfactory to the preferred stockholders.

The third method of liquidation involves all of the assets. This may be accomplished in the ordinary course of business by gradually reducing the scale of operations, disposing of unused plants and machinery, and, from time to time as cash permits, paying liquidating dividends to stockholders, creating the necessary surplus if it is not

already on the books. In such a process the object is not to make a profit but to reduce the losses of forced sale of assets by working up raw materials into finished products and selling these in the ordinary course of business. In mercantile liquidations it may be necessary with this method to make limited purchases of merchandise in order to keep a full line, the absence of which might repel customers. The inducement of cut prices, the reductions from normal increasing as the end draws near, is also offered, with a final bargain-snatching sale of 50 per cent.

The liquidation of the Gardner Motor Company illustrates this method. For the year ending December 31, 1931, the company balance sheet showed assets, book value, of $1,185,942 and debts of $7,172. Some of these assets, such as the stock of the Detroit Aircraft Company, had greatly depreciated in value. Being sensible men, the directors in 1930 began to curtail operations and planned to put the company in as liquid a position as possible in order to take advantage of any situation that might present itself. They worked up the stock of parts and materials into automobiles and sold them. Then they discontinued production except for the supplying of parts. They paid practically all of the debts. They transferred the warehouse to a separate company which was expected to realize $2,000 a month rental, doing also a loan business with capital furnished by the Gardner Company. The directors then passed the following resolutions:

1. That the company discontinue the manufacture and sale of automobiles and sell its parts department, including the good will, patterns, and dies of this department.
2. That the company sell and dispose of all its machinery and equipment.
3. That the company reduce its capitalization to create a surplus which will enable it to distribute to stockholders, as a dividend, such cash as, in the opinion of the board of directors, may be advisable in view of the necessity of working capital being retained pending the complete liquidation of the company's

assets. In the event of the stockholders' approving the reduction of the company's capitalization, the present board of directors propose to authorize the payment, forthwith, of a dividend amounting to 25 cents a share.

4. That upon the reduction of the capitalization, and the creation of a resulting surplus, the present board of directors propose to also distribute, forthwith, as a dividend to the stockholders, 30,000 shares of the capital stock of the Detroit Aircraft Corporation now held by the company, on the basis of one share of Detroit Aircraft stock for each ten shares of the stock of the company. For stock holdings of company representing any holding not evenly divisible by ten, a cash distribution will be made in lieu of a distribution of a fractional share of Detroit Aircraft stock, on the basis of the closing sale price of Detroit Aircraft stock on the New York Curb Market on the date of record of stockholders for the payment of such dividend.

5. The liquidation of the real estate holdings in Cleveland, Ohio, and the sale of the St. Louis plant building, and lease; the company carrying on, through its subsidiary, Rutger Street Warehouse, Inc., a general warehousing business, in the interim.

The outstanding capital stock of this company on December 31, 1929, was only $1,500,000. On February 8, 1931, it had in cash $259,653, notes and accounts receivable of $30,208, inventories $51,412, cash in the hands of a trustee $78,794—a total of $520,067; and in addition, its warehouse and aircraft stock, from which in this well-considered process of orderly liquidation, its stockholders may expect finally to receive in total the par value of their holdings. This is an excellent illustration of the truth of the proverb, "The prudent man foreseeth the evil and hideth himself, while the wicked rush on and are punished." There is indeed, as the directors stated, "doubt . . . as to future business success for small independent automobile companies," and the stockholders were fortunate that their affairs were in the hands of prudent trustees who could discern both the face of the sky and the signs of the times.

There is finally the last form of liquidation—by forced sale at the best price obtainable. A recent report to a

reorganization committee shows the probable results of liquidation under these circumstances.

The appraisal of the assets in the receiver's possession shows a total of $212,512.97, divided $63,271 to current assets and $149,241.97 to plant and equipment. Analysis of the appraisal shows that only a small fraction of the total "value" of the business could be realized by sale. Taking the fixed assets first, we have the following:

Land, including railroad sidings, piping, etc.	$25,368.22
Buildings	74,637.00
Sprinkler system	18,630.75
Equipment	30,606.00
	$149,241.97

If the business is liquidated, these assets have little value. The buildings and land could not be sold for any other manufacturing purpose. With the company out of business, the property would not have even a nuisance value to a competitor. With the buildings on the land, that would be worthless except for farming purposes, and the farm value would not pay the cost of removing the buildings.

The sprinkler system, carried at $18,630.75, might be sold, second hand, for $1,000, but this is doubtful. Much of the equipment consists of permanent structures—furnaces, ovens, etc., valueless elsewhere, while the movable machinery might bring $2,500 at a forced sale. A total value of less than $5,000 is all that could be realized for the fixed assets of the company.

Current assets present a better showing. We estimate, allowing for the expenses of the sale, and the difficulty in collecting accounts in second hands, that $40,000 might be realized, over a period, for the current assets, making a total of $45,000 which forced liquidation might produce, or, including half of a frozen bank deposit of the receivers, $7,000, a total of $48,500.

Out of this sum must be paid the following claims prior to the claims of the bondholders:

Loan of bondholder's committee	$10,000
Costs and fees of receivership	10,000
Taxes	10,000
	$30,000

A balance of $18,500, or about $50 on each $1,000 bond, is all that could be realized. The realization of even this sum assumes

a combination of good luck and good management in liquidation. Many manufacturing companies in this situation have liquidated without realizing anything for their creditors.

This situation differs from many, although it is otherwise typical of its class, in that there is still a considerable inventory. It shows, however, the small amount that can be obtained for fixed assets and machinery. The rule is a nominal amount for the real estate, unless liquidation occurs during a period of business activity, when the directors, who act as trustees in liquidation, may find some other concern to take up the burden either as owner or tenant. An illustration is the huge automobile plant at Elizabeth, New Jersey. This was completed in 1920 by advances from the Willys Company, a holding company for the automobile interests of John N. Willys. It was reported to have cost $9,000,000. This enterprise failed, and the plant was sold in 1922 to Durant Motor Company of New Jersey for $5,525,000 cash. Durant carried on operations in a desultory fashion until 1929, when the plant was abandoned for its original purpose and a contract of sale was made for $3,420,000 to the Bayway Terminal Company, purchase to be made at any time within two years from April, 1930. The latter company passed into receivership in January, 1932.

Here the depreciation in value, while extreme, was not total because of the opportunity of sale presented by the prevailing business activity. In contrast, a large textile company in New England in 1931 offered one of its plants for sale, for which ten years before it had refused an offer of $1,000,000, and could obtain no bids. The plant was considered worthless. When machinery is of standard pattern, *e.g.*, in textile operations, it can be sold at a price to second-hand dealers, but a price of 10 cents on the dollar of book value is often all that can be obtained.

Liquidation as a result of the sad experiences of 1930-1932 is likely to assume increasing importance. The in-

vestor has had impressed deeply on his mind the extreme hazards of modern business, the necessity of retaining ample cash reserves out of profits or original capital contributions, the danger of incurring bank obligations and of issuing fixed, interest-bearing obligations. This education in the dear school of experience in which everyone, not merely fools, must learn, is likely to result not only in greater caution in embarking upon untried business ventures, but in greater care in conserving their profits. And in particular, when the future is clouded with doubt, will stockholders' representatives be more open to the suggestion of liquidation, even when only half the loaf remains. It is far better than an Irish dividend.

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